

FRESH APPLES: iPODS AND iTUNES UPDATED

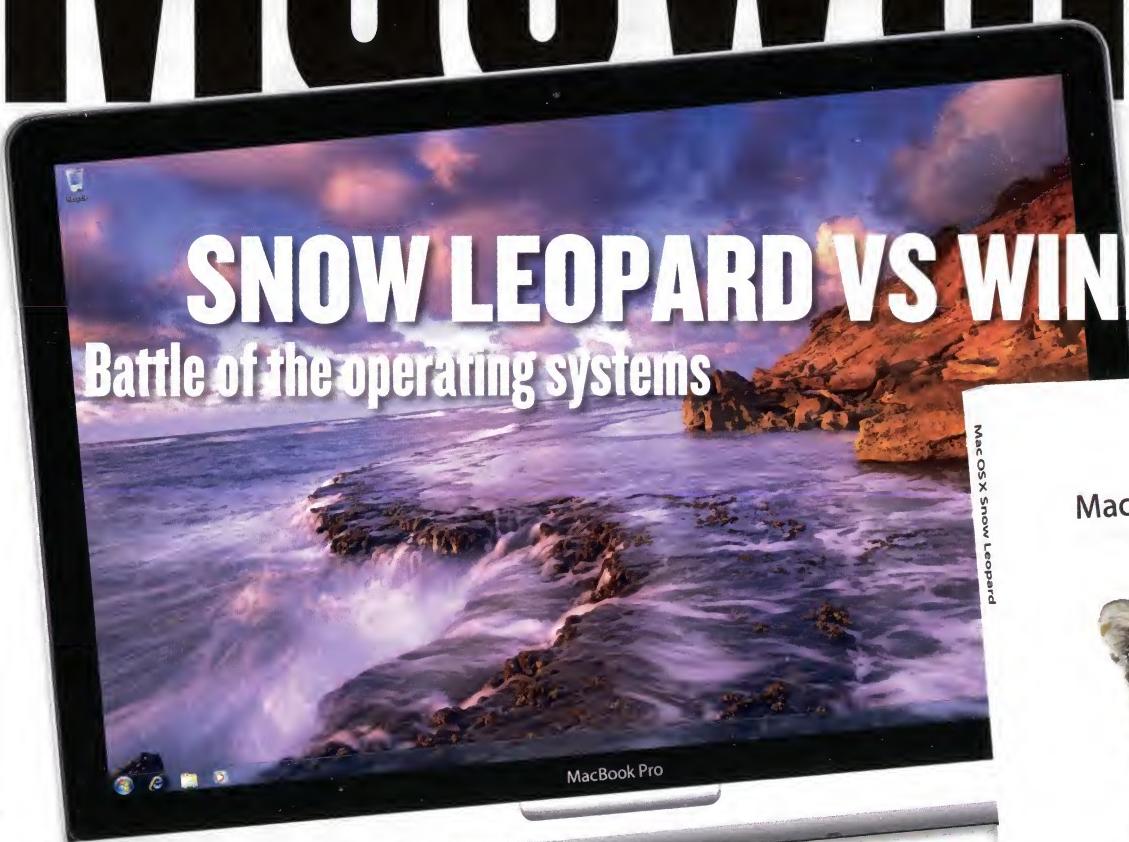
A U S T R A L I A N

# Macworld

October 2009  
\$6.95 inc GST  
\$NZ8.50 inc GST

## SNOW LEOPARD VS WINDOWS 7

Battle of the operating systems



Mac OS X Snow Leopard



 FileMaker



Award-winning, easy-to-use database software for Windows, Mac and the Web

[www.filemaker.com.au](http://www.filemaker.com.au)

HOW TO:  
RUN WINDOWS  
ON A MAC

←  
12-PAGE  
FILEMAKER  
BOOKLET

Please see newsagent if not attached to cover.

ALL NEW  
GADGET  
GUIDE



LAB TEST ROUTERS  
PARROT ZIKMU SPEAKERS  
PIONEER'S LATEST SATNAV



Print Post Approved No.PP349181/00252



9 771329 948021



PLUS: 5 NEW SECTIONS

# Pick A Laser Now & Save Up To **\$7,218!**

Colour laser printers separate the haves from the have nots. Everyone wants one. Not everyone has one.

If you don't have one at your studio, office or home, you're losing impact or much needed time, money & quality control outsourcing. Or even worse... feeding cheap but hungry ink jets.

If you do have one and it's not one of the following from Fuji Xerox, chances are you're paying too much per copy or compromising on quality.

So check out these limited offers and decide what's best for your pocket and your image.

Or call 1800 334 684 to ask for help.

**Hassle Free A4 Colour  
Only \$1,199 Save \$1,039**

Wouldn't you swap your A4 ink jet or mono laser printer for an A4 Colour Laser if you could afford it?

Even kids know they'll do better if their works in colour instead of black & white. And we all know there's a reason why they almost give away A4 ink jet printers.

#### C3300 Package Offer

- 1.25 GB RAM (inc. extra 1GB @ no charge)
- Duplex (auto double-sided printing)
- 10/100 Ethernet network capable
- Up to 25ppm colour/30ppm mono
- First page out in under 16 seconds.
- Only 12c per page in full colour\*.
- Under 2c per mono page\*.
- Standard toner cartridges give 6000 black or 4000 pages of full colour\*\*!
- 1200 x 1200 DPI full colour laser printing
- True Adobe Postscript Level 3

\* Est. based on 5% coverage/page/colour toner

\*\* Hi Yield Toners offer 9000 pages/colour toner

#### C3300 Package Worth

**\$2,238** RRP inc gst  
\$1,499 RRP for Printer,  
\$739 RRP for extra 1GB RAM

**Now only**  
**\$1,199** inc gst  
**You Save**  
**\$1,039** inc gst



#### Plus Bonus Toner Offers!

- Trade in any old networkable laser printer and get \$500 worth of toner free (claimable online directly) from Fuji Xerox
- Get a 2nd set of standard yield CMYK Toners at time of purchase for only \$299

#### Up to 50% Tax Deductible Until Dec 31

- All three offers should qualify for a tax deduction. See this link for details...  
[www.ato.gov.au/taxprofessionals/content.asp?doc=/Content/00175431.htm](http://www.ato.gov.au/taxprofessionals/content.asp?doc=/Content/00175431.htm)

## The best A3 Colour? Get a Phaser 7760

Sure, it costs more to own upfront, but if you run high volume, you'll save all that money and more over the long haul.

At 10c per colour page\*, it costs 20 - 40% less to run than its competition.

But price is only half the story.

Pantone approved colour simulations and unique colour management tools give you more control over your colour.



### Phaser 7760 DN Offer

- Only 10c a page full colour: under 1c mono\*.
- Pantone approved colour simulations
- Professional Colour Calibration Tools
- Photo mode for smooth colour transitions
- Black trapping for sharper clearer text .
- Handles oversized A3 & heavy weight stocks
- Upgraded to 1 GB RAM for FREE
- Duplex (auto double-sided printing)
- 10/100/1000 Ethernet network capable
- WAN/LAN networking and IPP support
- 35ppm color/45ppm mono
- First page out in 9 seconds.
- 25,000 pages/colour toner cartridges \*
- Expandable to become a complete in-house printing and finishing solution
- 3 Year Extended Warranty
- Bonus Hi Yield Toners for 50,000 pp/colour\*
- 1200 x 1200 DPI full colour laser printing
- True Adobe Postscript Level 3

\* Est. based on 5% coverage/page/colour toner

### 7760 Package Worth

\$19,168 RRP inc gst

\$14,609 RRP for A3 Laser Printer

\$334 RRP for extra 512KB RAM

\$1,850 RRP for 3 Year Extended Warranty

\$1,976 RRP for 2nd set of Hi-Yield CMYK Toner (25K\*ea)

\$399 Melb Metro Install/Interstate Delivery

### Now Only

\$11,950 inc gst

### You Save

\$7,218 inc gst

### Rent for \$89 per week

- Retain it @ end of rental period.
- 36 month rental to approved applicants - you pay \$13,844
- Other finance plans also available



## Want to pay less now? Get a Docuprint C4350

Cheap to buy and run, their reliability and colour consistency have made them popular across the globe. (Chances are your competitors already have one.)



### Docuprint C4350 Offer

- Reliable, consistent colour
- Handles oversized A3 & heavy weight stocks
- 1 GB RAM upgrade FREE
- Duplex (auto double-sided printing)
- 10/100 Ethernet network capable
- WAN/LAN networking and IPP support
- Up to 35ppm color/45ppm mono
- First page out in under 10 seconds.
- 15,000 pages/colour toner cartridges.
- Only 16c per page in full colour\*.
- Under 2c per mono page\*.
- 1200 x 1200 DPI full colour laser printing
- True Adobe Postscript Level 3
- Expandable to become a complete in-house printing and finishing solution.

\* Est. based on 5% coverage/page/colour toner

### Bonus Toner Offer

- Trade in any old networkable Laser Printer and get \$500 worth of toner free (claimable online directly) from Fuji Xerox

### C4350 Package Worth

\$9,802 RRP inc gst

\$7,925 RRP for A3 Laser Printer

\$1,478 RRP for extra 1GB RAM

\$399 Melb Metro Install/

Interstate Delivery

### Now Only

\$5,299 inc gst

### You Save

\$4,503 inc gst

### Rent for \$44 per week

- Retain it @ end of rental period
- 36 month rental to approved applicants - you pay \$6,864
- Other finance plans also available



**Other World Computing**  
Serving the Mac Universe since 1988

815.338.8685  
[www.macsales.com](http://www.macsales.com)

All prices  
quoted in US  
dollars.

## Why buy from OWC? We don't just sell it, we tell you how to install and use it.



Live Chat support...  
even on weekends.



Extremely fast delivery  
at a reasonable cost.



Expert installation services  
with fast turnaround.



Free lifetime  
technical support.



Free online "Do-It-Yourself"  
videos for easy installation.  
Check out our new page!  
[www.macsales.com/installvideos](http://www.macsales.com/installvideos)

## High Capacity Storage Available with FireWire 800, FireWire 400, USB 2.0, and/or eSATA

[www.macsales.com/firewire](http://www.macsales.com/firewire)



5.5"x3.5"x1.0"



8.9"x1.4"x4.6"

**OWC® Mercury  
On-The-Go Pro™  
Portable Solutions**  
Bus powered and up to  
500GB 7200RPM in your  
pocket from **\$62.99**

**OWC Mercury Elite-AL  
Pro™ Single & Dual Drive  
Solutions** Up to 4.0TB  
of high-performance  
storage for a multitude  
of needs from **\$74.99**



Mouse not included.

9.65"x5.31"x6.96"



9.3"x2.8"x5.6"



6.5"x6.5"x1.5"

**NewerTech miniStack®  
High-Performance Storage**  
Up to 2.0TB from **\$94.99** + with  
built in USB 2.0 and FireWire®  
800/400 hubs for the ultimate  
multimedia center

**Prosoft Drive Genius v2.x** reg. price \$99.99  
Maintain, Manage, Optimize & Repair your Hard Drives.

**Prosoft Data Rescue II** reg. price \$59.99  
The best data recovery software for the Mac platform.

## Easiest Way to Dock and Access Hard Drives at Will

[www.macsales.com/voyager](http://www.macsales.com/voyager)

### NewerTech® Voyager™

SATA I/II hard drive docking solutions support  
all 2.5" & 3.5" hard drives up to 2.0TB!



**Voyager Q**  
FW800/400+  
USB2.0+eSATA  
only **\$89.99**



**Voyager S2**  
USB2.0+eSATA  
only **\$39.99**

### Data Access Now Made Simple!

Plug and Play, Hot Swap, and  
add a new drive at anytime.  
Offers flash memory card like  
ease of use, but with huge  
capacity gains.



### NewerTech USB 2.0 Universal Drive Adapter™

[www.macsales.com/newertech](http://www.macsales.com/newertech)  
Turns any 2.5", 3.5", and 5.25"  
IDE/ATA & SATA drive into an  
external storage solution. only **\$29.99**

### Build your own drive!

To see a full selection of kits, visit: [www.macsales.com/enclosures](http://www.macsales.com/enclosures)

0GB 'Add your own hard  
drive' kits available  
from **\$19.99**



Available with FireWire 800, FireWire 400, USB 2.0, and/or eSATA

### NewerTech Accessories

[www.macsales.com/newertech](http://www.macsales.com/newertech)

### NewerTech 3 in 1 Cable for iPod and iPhone

Audio/Sync/Charging Cable for iPod and iPhone  
lets you connect your iPhone or iPod to any PC or  
Mac with a USB port and synchronize with iTunes  
to update your pictures, music and videos.



**\$14.99**

### NewerTech FW800 to FW400 Adapter



**ONLY \$9.95**

Voyager + 1TB Hard Drive from **\$119.99**

BUNDLES available up to 2TB!

At OWC Our Customers Come 1st!

QUALITY PRODUCTS

COMPETITIVE PRICES

EXPERT SUPPORT



Award-winning  
support...BizRate  
Circle of Excellence  
5 straight years.



Visit: [www.macsales.com](http://www.macsales.com) Call: 815.338.8685

# NEW...LOWER shipping rates!

Orders ship from USA with extremely competitive shipping rates.

## Customer Quote CORNER

"With an enormous product line and great service, I highly recommend your company to other Mac owners in Australia."

- Michael B.

## More Memory = Faster Mac

[www.macsales.com/memory](http://www.macsales.com/memory)

Apple® Mac® Pro XEON™ - Max Any Model Up To 32GB!\*

As low as...

Get the right memory for any 2006/2007/2008 model



\*Up to 8GB for March 2009  
Quad-Core Model



2.0GB  
**\$34.99**

4.0GB Kits  
**\$67.99**

6.0GB Kits  
**\$174.97**

Memory for iMac®, MacBook®, MacBook Pro,  
Mac mini (Intel)



"That's a great deal!"  
- Dave Hamilton, Mac Observer

Find what you need to max your Mac's  
performance in 3 easy clicks with our on-line  
memory configurator!  
[www.macsales.com/MyOWC](http://www.macsales.com/MyOWC)

## Your Online Mac Upgrade Center:

Internal Hard Drives [www.macsales.com/harddrive](http://www.macsales.com/harddrive)

### LAPTOP DRIVES

Hitachi®, Seagate®, Toshiba®, Western Digital®  
2.5" Serial ATA, IDE/ATA from 80GB to 500GB



500GB 7200RPM Seagate 9.5mm  
now **\$129.99**

All OWC memory meets or exceeds manufacturer specifications for maximum quality assurance,  
but at the independent prices you can afford. Plus, you receive the industry-leading Lifetime  
Advance Replacement Warranty and award-winning US-based customer support.



SSD Drives - Now Available!



500GB Hitachi 7200RPM  
3.5" SATA II  
now **\$59.99**



1.0TB Seagate 7200RPM  
3.5" SATA II  
now **\$97.99**

### DESKTOP DRIVES

Hitachi, Seagate, Western Digital®  
3.5" Serial ATA, IDE/ATA from 80GB to **2.0TB**



2.0TB Hitachi  
7200RPM 32MB  
now **\$249.99**

## We Have The Right Memory For Your Mac

From 68020 to PPC to Intel®, from  
Classic to Pro — OWC has the right  
memory for any Mac upgrade!

As low as  
**\$15.79**  
per GB

We have  
memory  
for any Mac  
upgrade!



Learn more about OWC's new  
'Green' headquarters.

Conservation & Recycling  
for a greener tomorrow

<http://www.macsales.com/GREEN>



### Looking forward!

100% alternative energy source  
anticipated to be operational Fall 2009.





Visit our new webstore at [store.mymac.com.au](http://store.mymac.com.au)

## My Mac Sydney

20 Bronte Rd,  
Bondi Junction, NSW, 2022  
T. (02) 8383 1600  
F. (02) 9386 9381  
[www.mymac.com.au](http://www.mymac.com.au)

## My Mac Melbourne

172 - 192 Flinders St  
Melbourne, VIC, 3000  
T. (03) 9662 9666  
F. (03) 9662 9855  
[www.mymac.com.au](http://www.mymac.com.au)



**MacBook Air**  
From \$2,399.00



**MacBook Pro 13"**  
From \$1,899.00



**MacBook Pro 15"**  
From \$2,699.00



**MacBook Pro 17"**  
From \$3,999.00



**MacBook**  
Just \$1,599.00



**iMac**  
From \$1,999.00



**Mac Pro**  
From \$4,499.00



**Mac mini**  
From \$1,049.00



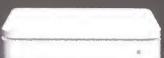
**Cinema Display LED 24"**  
\$1,499.00

## Apple Accessories

My Mac has the best range of Apple Accessories.



**Wireless Apple Keyboard**  
\$109.00



**Airport Extreme**  
\$279.00



**Time Capsule - 1TB**  
\$479.00



**Apple TV**  
From \$329.00



**MacBook Air Superdrive**  
\$139.00

## Incipio Cases

Give your iPod or iPhone a special touch with these exclusive cases.



**Incipio Orion**  
\$39.95



**Incipio Dermashot**  
\$29.95



**Incipio Edge Slider**  
\$34.95



**Incipio Feather**  
\$39.95

## iDowell UPS

The days of bulky and noisy UPS that need to be hidden under your desk are over.



**iBox**  
\$399.00



**iPack**  
\$899.00

# iSkin



iSkin Revo 2  
\$59.95



iSkin Vibes for nano 4G  
\$39.95



iSkin Groove Pack  
From \$54.95



iSkin Solo  
\$49.95



iSkin Solo FX  
\$54.95



iSkin Privacy Film  
\$34.95



Cerulean F1  
\$149.95



Cerulean X1  
\$149.95



Cerulean XLR  
\$49.95

# rocstor®

store your future



RocPro 225  
3.5", USB  
1TB, 1.5TB  
From \$249.95



RocPro 850  
3.5", eSATA, FW, USB  
1TB, 1.5TB, 2.0TB  
From \$299.95



RocPort ID3  
USB Mobile (Pocket) HD  
320GB and 500GB  
From \$169.95



The AIRHAWK A3  
320 GB Mobile (Pocket) HD  
with USB port  
\$169.95



The AIRHAWK A9  
FW 800, FW 400 and  
USB Ports  
From \$249.95



RocPort ID9  
FW 800, FW400 - USB  
320GB and 500GB  
From \$239.95

## iPods.

Enjoy an iPod from \$129.00.



iPod nano From \$199.00



iPod classic Just \$339.00



iPod shuffle 4GB Just \$129.00



iPod touch From \$329.00

## Get Your Copy Of Mac OS X Snow Leopard From \$39.00

Mac OS X Snow Leopard is an even more powerful and refined version of the world's most advanced operating system. In ways big and small, it gets faster, more reliable, and easier to use. It offers hundreds of enhancements, out-of-the-box support for Microsoft Exchange, and new core technologies that take advantage of the powerful hardware in every Mac.



# CONTENTS

# DUAL-BOOTING

026

A Mac doesn't only have to be a Mac – it can be a Windows PC as well.

SNOW LEOPARD VS WINDOWS 7 036

It's the battle of the operating systems as Apple upgrades OS X to version 10.6 and Microsoft undoes the damage done by Vista.

**008** AMW October 2009

[www.macworld.com.au](http://www.macworld.com.au)

## Macs and home entertainment Parrot Philippe Starck 'Zikmu'

# PHOTOGRAPHY

Get your focus right  
Camera Armor Seattle Sling & Pixelmator

# PHOTOGRAPHY

---

## Get your focus right

# Camera Armor Seattle Sling & Pixelmator

HELP AND TIPS

016  
020  
022  
024  
042

054

060





DAVE BULLARD

## Brave new (Mac)world

**I**t's new, it's fresh, it's more exciting than Snow Leopard! It's the new-look *Australian Macworld*!

Yes, what you're holding is the AMW you've always known and loved, but with a new, modern design, a more user-friendly feel and some new content.

To cut a long story short, we conducted a reader survey back in April, you answered and we listened. And we've also taken note of all the suggestions you've made on the AMW Forums and in letters to the Editor. (*Australian Macworld* readers are so passionate and have such a sense of ownership in the magazine that we wouldn't dare change anything without speaking to you first.)

The first thing you'll notice is that the "Command" section names have gone. They were introduced the last time the magazine was redesigned – back in November 2007 – but they had run their course and were just confusing to many readers.

below:  
Luke Batty, a Year 12 student at Victoria's Eltham College of Education, drew this excellent graphic, called *Slave to the Fruit*, in class. "We have a Mac classroom, so this is not an unfamiliar sight!" says teacher

Ana Tuckerman, who sent it in. Any more artists out there? Send us any Apple-related graphics and we'll consider them for publication. Nice one, Luke.

By the way, just to clear things up, Martin Levins' education column was Command-Y ("Redo") because you learn by doing things over and over.

Anyway, we're now calling a spade a spade. The letters page is "Letters", the help section is "Help", Martin's column is "Education" ... you get the drift.

All the content you know and love is still here, and we've also added a couple of sections.

"Play" on Page 24 is a collection of movie, music and game reviews. We're using our Macs, Apple TVs, iPods and iPhones for so much home entertainment these days it just made sense to introduce this section.

And speaking of entertainment, the Lifestyle section starting on Page 50 will be looking at ways to integrate your Apple products and peripherals into your wider life at home and on the road. Similarly, Photography (Page 54) looks at all aspects of photography and imaging – among the biggest requests from the survey.

FYI, the top 10 requests for coverage were: Storage, security, photography, printers, video, cameras, routers, displays, speakers and scanners. We've covered most of these subjects in the past few issues, and you can look forward to plenty more in the months to come.

Also new are the Mac Gems and App Guide sections. The former, on

**AMW readers have such a sense of ownership in the mag that we wouldn't dare change anything without speaking to you first."**



Page 20, looks at the best in free or low-cost Mac software, while the latter, on Page 22, features iPhone and iPod touch apps that have caught our eye.

These two sections have the capacity to become a showcase for Aussie software, so please keep us informed of any local heroes you think we should feature.

Finally, a word of thanks to AMW designer Hannah Ogilvie for giving us a really great new look. Redesigning on the fly and smiling at the same time isn't easy! ☺

D. Bullard

# Easy. Fast. Powerful.

Get the complete essentials to run Windows on a Mac – including \$300 in premium software.



With Parallels Desktop® 4.0 for Mac you can:

- Protect and manage Windows with the finest Internet security, data protection and disk management software available – a \$300 premium value.
- Run Windows up to 50% faster with an updated virtualization engine.
- Optimize performance as you move between Windows and Mac with an adaptive hypervisor.
- Extend your Mac's battery life by up to 20% with virtual machine power management.
- Set USB device preferences and share removable storage between Windows and Mac with SmartX Technologies.
- Virtualize Mac OS X Server, Linux and various versions of Windows – including Windows 7 Beta.



Want to run Windows on a Mac without rebooting? Then look no further than Parallels Desktop® 4.0 for Mac. With over 50+ groundbreaking features and capabilities than previous versions, it's no wonder it was recently named Best Desktop Virtualization for Mac in InfoWorld's 2009 Technology of the Year awards. Trusted by over 1,500,000 users worldwide, Parallels Desktop® 4.0 for Mac is the best selling, top rated and most trusted Mac system utility available.

Worried about security and backups? Need better Windows and Mac OS X integration? Want the ability to run PC games and 3D software? Only Parallels Desktop® 4.0 for Mac gives you everything you need to run Windows on a Mac.

**CONEXUS**

Australian Distributor ph.02 99750900 [www.conexus.com.au](http://www.conexus.com.au)

**|| Parallels™**  
Optimized Computing

Check out the demo and download a FREE fully-functional 15-day trial today at [www.parallels.com](http://www.parallels.com)



## Vent your spleen

### NOT A FAN

I find my new 13in MacBook Pro, and possibly most new MacBook Pros, have a problem with temperature control: The fan does not increase air flow when processor temperature increases.

For a processor-intensive task the laptop runs silent but the processor approaches meltdown. My fan is stuck on 2000rpm after initial startup at about 2500rpm.

You can install iStat Menus ([www.islayer.com/apps/istatmenus](http://www.islayer.com/apps/istatmenus)) to see fan speed and temperature. (iStat Menus wasn't compatible with Snow Leopard at the time of writing. – Ed)

To adjust fan speed manually, smcFanControl, ([www.eidac.de/?p=134](http://www.eidac.de/?p=134)) is good. To automatically adjust fan speed, Fan Control ([www.lobotomo.com/products/FanControl](http://www.lobotomo.com/products/FanControl)) appears to work well, and

installs a System Preference to inspect and/or adjust.

Both smcFanControl and Fan Control claim to only increase fan speed above that set by Mac internal controls (not great protection if the fan internal control is stuck at 2000rpm against a maximum of 6000rpm).

All are shareware with disclaimers on everything – try at your own risk.

*Bill Whiten,  
Indooroopilly, QLD*

Apple Australia replies:

We do not recommend the use of third party products that can change the thermal tuning that Apple has developed for each product.

The MacBook Pro 13in and all our products are engineered to give the best performance, optimum battery life and/or energy use and maintain an environment inside the computer that is within the manufacturers' tolerances for all the components.

you transferred the movie to a DVD format this would be illegal. Also, it is a criminal offence to possess the software that allows you to make an exact (format) copy. If MacTheRipper created a file that prevented you from transferring the file onto a DVD then it would be legal – but this is not the case.

*Stewart Lehr, Kingsford, NSW*

I have no doubt you're right as far as commercial DVDs go, Stewart. But surely you can possess copy software to use with DVDs for which you hold the copyright – your home movies, for example? Does anyone have the definitive answer on this? – DB

### E-TAX UNDER EMULATION 1

With regard to the Letter/Comment in August's Australian Macworld, I wanted to let you know that I've successfully used Windows emulators for at least the last three years to complete the family taxes with e-tax. I've used both Parallels and VMware with no issues. I've also emailed the ATO each year to ask them for a Mac version.

*Theresa Lyckholm, Via email*

### E-TAX UNDER EMULATION 2

I run XP in VMware 2.0.4 under Mac OS X 10.5.7 and it was possible to complete my 2009 tax returns using e-tax. All good.

*David Lunt, Via email*

Thanks, Theresa and David. We got dozens of replies from people who've used e-tax under emulation, so it obviously works fine. But, ATO, we still need a native Mac version. – DB

### DVDS AND THE LAW

In the Off the Net column 'MacTheatre' (AMW 09.2009) which outlines various tools for media, the author has in effect advised readers to breach Australian copyright law.

The law states that if you own a DVD you can format-shift the item to another format but you cannot make a copy of a DVD. The article

said MacTheRipper is, "Designed for making 'fair use' backups of DVDs. Ideal to prevent your kids from scratching your precious DVDs."

There are no fair use provisions under Australian copyright law to make an identical copy of a format. If you just watched the ripped movie on your hard drive that would be legal but if

Each month, Conexus is giving away a prize to the reader who submits what we think is the most interesting letter. This month, the prize is an iHome iH15 LED Colour Changing Stereo System for iPod, worth \$149.95. What looks like a white plastic cube is actually a colour-shifting light system, emitting a soft glow that shifts from orange to yellow to green, purple, blue, pink, and red, visible faintly under normal light, and charmingly noticeable in a darker room. Separate buttons control the system's audio power, lighting power, and volume, so you can have the speakers off but the lighting on, and vice-versa. [www.conexus.com.au](http://www.conexus.com.au)



**TERMS AND CONDITIONS.** Conexus letter of the month 1. Instructions on how to enter form part of these conditions of entry. 2. To enter send tips or queries to [macworldeditor@niche.com.au](mailto:macworldeditor@niche.com.au) with a subject header of "Letter to the Editor". Entries will be judged by the editorial staff of Australian Macworld. The judges' decision in relation to any aspect of the competition is final and binding on every person who enters. No correspondence will be entered into. Chance plays no part in determining the winner(s). Each entry will be individually judged based on its degree of interest. 4. Employees, their immediate families and agencies associated with this competition are not permitted to enter. 5. The Promoter accepts no responsibility for late or misdirected entries. 6. The best entry/entries as determined by the judges will win the prize(s). 7. The Promoter is neither responsible nor liable for any change in the value of the prize occurring between the publish date and the date the prize(s) is claimed. 8. The prize(s) is not transferable and will not be exchanged for cash. 9. The winner(s) will be notified by email. 10. All entries become the property of the Promoter. 11. The collection, use and disclosure of personal information provided in connection with this competition is governed by the Privacy Notice 12. The Promoter is Niche Media Pty Ltd of 170 Dorcas Street, South Melbourne, Victoria 3205 Ph 03 9948 4900, (ABN 13 064 613 529).

■ Letters should be emailed to [macworldeditor@niche.com.au](mailto:macworldeditor@niche.com.au) with a subject header of "Letter to the Editor" or by post to *Australian Macworld* Mailbox, 170 Dorcas Street, South Melbourne, Victoria, 3205.

■ Letters of fewer than 200 words are given preference. Comments posted to the forums on [www.macworld.com.au](http://www.macworld.com.au) are also eligible for the prize. We reserve the right to edit letters and probably will.

■ To be eligible for the prize, you must include your full name and address, including state or territory.



## Needs NoteBook

Stickies, scraps of paper, web clippings, meeting notes, reminders — take control of it all with Circus Ponies NoteBook, the award-winning application for managing information. Get organized using a familiar notebook interface,

with pages and tabs, sections and subsections. "Clip" web research, e-mails and other content to your Notebooks for later reference. Create voice-annotated notes and review them from your computer or iPod. Diagram and sketch

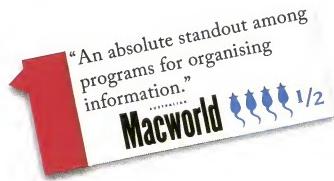
## Has NoteBook

when words won't suffice. Find anything instantly using NoteBook's patented Multidex™. Share your Notebooks as PDFs or as websites. And much more. NoteBook has everything you need to get organized.

**Download NoteBook right now and try it for yourself, FREE for 30 days**  
[www.circusponies.com/trialmwau](http://www.circusponies.com/trialmwau)



CIRCUS PONIES  
NoteBook



Apple Store

mac  
centric

next byte

PICA  
australia

Streetwise  
com.au

# NEXT ISSUE....

## CAMCORDER SPECIAL



### BUYING GUIDE:

We explain all the options and help you choose the type of camcorder that's best for you.

### LAB TEST:

A side-by-side review of the latest models.

**PLUS:** In depth with the latest iPods.



# AUSTRALIAN Macworld

October 2009 / Issue No. 140

**Publisher**

Niche Media

**Associate Publisher**

Nick Harris

nick.harris@niche.com.au

03 9948 4976

**Editor**

Dave Bullard

dave.bullard@niche.com.au

**Business Development Manager**

Liana Pappas

liana.pappas@niche.com.au

03 9948 4974

**Designer**

Hannah Ogilvie

hannah.ogilvie@niche.com.au

**Production Coordinator**

Alison Copley

alison.copley@niche.com.au

**Prepress**

Emma Meagher

emma.meagher@niche.com.au

**Online Editor**

David Braue

david.braue@niche.com.au

(niche):

**Australian Macworld**

is a publication of Niche Media Pty Ltd

ABN 13 064 613 529

170 Dorcas Street,

South Melbourne, Victoria 3205

Tel: 03 9948 4900 / Fax: 03 9948 4999

**Chairman and Publisher**

Nicholas Dower

**Managing Director**

Paul Lidgewood

**Financial Controller**

Sonia Jurista

**Studio Design Manager**

Keely Atkins

keely.atkins@niche.com.au

**Subscription Inquiries**

Free Call: 1800 804 160

subscriptions@niche.com.au

**CTP/Print**

Bluestar print - Australia

03 8514 6000

ISSN 1329-9484

Digital Library Images supplied by PhotoDisc ([www.photodisc.com](http://www.photodisc.com))  
Australian Macworld has reprint rights to Macworld, a Mac Publishing LLC title. Material appearing in Australian Macworld is copyright and reproduction in whole or in part without express permission from the publishers will result in litigation. Australian Macworld is published under licence from Mac Publishing LLC, San Francisco, California. Editorial items appearing in Australian Macworld that were originally published in Macworld or Mac Publishing LLC's other publications are copyright property of Mac Publishing LLC, which retains all rights. Copyright ©2009 Mac Publishing LLC. Macworld is a trademark of Mac Publishing LLC.  
Products presented in Gadget Central are included for information purposes only and carry no endorsement from Australian Macworld's editorial team. The issue of Australian Macworld may contain offers, competitions, surveys, subscription offers and premiums that, if you choose to participate, require you to provide information about yourself. If you provide information about yourself to NICHE MEDIA, NICHE MEDIA will use the information to provide you with the products or services you have requested (such as subscriptions). We may also provide this information to contractors who provide the products and services on our behalf (such as mail houses and suppliers of subscriber premiums and promotional prizes). We do not sell your information to third parties under any circumstances, however the suppliers of some of these products and services may retain the information we provide for future activities of their own, including direct marketing. NICHE MEDIA will also retain your information and use it to inform you of other NICHE MEDIA promotions and publications from time to time. If you would like to know what information NICHE MEDIA holds about you please contact: The Privacy Officer, NICHE MEDIA PTY LTD, 170 Dorcas Street, South Melbourne, Victoria 3205.

# AVIC F-SERIES



THE PIONEER OF SOUND

The AVIC-F310BT – the complete entertainer with the added security of a detachable face. It's the choice for those wanting to fully integrate their communication, music and navigation in one sleek, stylish and very powerful solution.



70 YEARS OF  
INNOVATION

IN 1990

PIONEER  
INTRODUCED THE  
**WORLD'S FIRST**  
IN-CAR NAVIGATION  
SYSTEM

IN-CAR ENTERTAINMENT • COMMUNICATION • NAVIGATION



DO YOU WANT TO  
EXPLORE?

- Full 4.3" touchscreen operation
- Advanced TTS voice guidance
- Fixed safety camera locations



DO YOU WANT TO  
TALK?

- Hands free phone calls
- Auto audio mute on calls
- Parrot Bluetooth



DO YOU WANT TO  
PLAY?

- iPod/iPhone/USB/CD audio playback
- iPod cable included
- Advanced Sound Retriever

### SAFETY IN MACS

Macs were virtually immune from virus and malware issues in June, according to data accumulated by on-site tech support company Geeks2U. In its first Australian Computer Barometer, the company says computers infected with viruses and other malware accounted for 27 percent of its service call-outs – but only three cases involved Macs. Victoria bucked the support-call trend set by the other states by having the lowest percentage of Vista problems and the highest number of Mac issues.

[www.geeks2u.com.au](http://www.geeks2u.com.au)

### SMALL WONDER

What promises to be one of the best small iPod speaker systems is coming to Australia later this month. The audiophile-quality Model S by Switzerland-based Geneva Lab is a stereo unit with a motorised iPod/iPhone dock, iPod-like click-wheel control, FM radio and alarm clock. Local distributor Audio Dynamics say the Model S has a small size but a big sound, and if the other GenevaSound products are anything to go by we're in for a real treat.

[swiss.genevalab.co.uk](http://swiss.genevalab.co.uk)

### GAME ON

Victorian gamers get the chance to indulge themselves at the month's end when the eGames Expo hits the Royal Exhibition Building in Carlton. Happening from 30 October to 1 November, it "will showcase some of the world's leading game publishers and developers as well as the latest news and products from the digital entertainment and video game industry". There will be head-to-head challenges for competitive gamers, and a Kids Zone for the young'uns. The Expo is part of the International Digital Entertainment Festival.

[www.idef.com.au](http://www.idef.com.au)

### DNA ON THE GO

iPhone users could one day be using an app to carry around their DNA information, according to San Diego-based biotechnology company Illumina. "Part of it may be on the phone itself, and part of it may be in the cloud that the phone would have access to," says president and CEO Jay Flatley, "It would allow the customer to bring up the application and interact with it live in conjunction with their doctor." Though Illumina's developers had never written an iPhone application before, they were able to produce a fully functional prototype of the application within just 10 days.

[www.illumina.com](http://www.illumina.com)



### Tweaks for iPods, iTunes

Predictions of Beatles on iTunes, camera-equipped iPod touches and tablet and netbook computers have failed to materialise, but Apple has delivered a solid update to iTunes and the iPod line in its latest round of announcements.

Among the most important updates are: the iPod nano now features a built-in camera, FM radio and pedometer; and iTunes 9 includes Home Sharing, which brings iTunes synchronisation to up to five authorised computers, and adds the ability to organise your iPhone and iPod touch apps in iTunes.

**iPod nano.** The music player now comes in 8GB and 16GB models, priced at \$199 and \$249, respectively. It features a video camera, microphone and speaker, and can display video or sync it back to your computer for uploading to YouTube.

According to Apple CEO Steve Jobs – making his first public appearance at the mid-September Apple event since returning from a six-

month medical leave – the company added the camera to the nano line to capitalise on the popularity of pocket-sized flash-based video cameras.

The video camera shoots H.264 VGA video – 640 x 480 pixels – at up to 30 frames per second with AAC audio. The microphone can also be used with the voice-recording feature.

The latest model also now has VoiceOver support, which provides audible navigation cues in 20 languages, and it supports the new Genius Mixes feature, which creates up to 12 endless playlists of music based on your existing library.

A built-in pedometer can measure your steps and sync the information with the Nike+ service. And, in a first for an iPod, the nano offers a built-in FM radio tuner with support for live pause. This allows users to pause a live program and resume it later.

Also supported is iTunes Tagging, which lets listeners tag radio songs they like and then preview and optionally purchase the song next time they sync with iTunes.

Steve's iPhone:

Category	Name	Date
Education	ABC Animals	4.5 MB
Social Networking	AIM (Free Edition)	1.9 MB
Healthcare & Fitness	aSleep	112 MB
Entertainment	Bubbles	0.2 MB
Games	Enigma	3.3 MB
Productivity	Gas Cubby Lite	1.4 MB
Games	Labyrinth	1.3 MB
Finance	Mini Mortgage Manager	0.3 MB
Entertainment	Remote	1.4 MB
Games	Super Monkey Ball	36.3 MB
Utilities	Thinas	

The physical form factor of the nano remains mostly unchanged, although it now features a larger 2.2-inch, 240-by-376-pixel, display and comes in nine colors: silver, black, purple, blue, green, orange, yellow, (PRODUCT) RED and pink.

**iPod touch.** Apple boosted the capacity of the touch and bolstered the performance in the 32GB and 64GB models, but otherwise left that iPod line unchanged. But it's strange that the touch didn't get a camera and microphone upgrade like the nano.

The company also cut the price on its entry-level 8GB iPod touch to \$268.

Apple senior vice president of worldwide product marketing Phil Schiller noted that a similar price cut to the iPod mini back in 2005 helped spike sales of that since-discontinued model, so it's clear Apple is hoping that a lower entry-level price for the touch helps spark new sales prior to the Christmas shopping season.

Apple may not have much to worry about in that regard. According to the latest figures, the company has sold 20 million iPod touch models, making it the fastest-growing iPod model. With 30 million iPhones sold, 40 percent of the devices running the iPhone operating system are iPod touches.

Apple has also boosted the capacity on the touch with a new 64GB model. The 32GB and 64GB models (\$399 and \$549 respectively) are now 50 percent faster and feature support for the Open GL|ES 2.0 graphics API.

**iPod classic:** Despite speculation that Apple might discontinue this model – the last remaining hard drive-based device in its iPod line – it remains and even gets an expanded capacity. The iPod classic now features 160GB of storage for \$329.

**iPod shuffle.** Not much to report here. The shuffle comes in five basic

colours – silver, black, pink, blue and green – plus a special-edition stainless steel model. The 2GB and 4GB models sell for \$79 and \$109 respectively. The steel one, which only comes in 4GB capacity, costs \$139.

**iTunes 9.** The new version of iTunes features Genius Mixes for creating recommended playlists.

Made possible by having more than 27 million libraries built from more than 54 billion songs submitted and analysed, Genius Mixes was likened by Jobs to having a personal DJ at a radio station. Movies and apps can also be categorised.

Then there's Home Sharing, which brings iTunes synchronisation to a new level. Up to now, it hasn't been easy to synchronise iTunes between multiple computers without the use of scripts or third-party applications. Now you can copy songs, movies, and TV shows among up to five authorised Macs in your house. →

## Powerhouses of Speech

MacSpeech Dictate for everyone. MacSpeech Dictate Medical for doctors, dentists, and all medical professionals. Macintosh speech recognition solutions so good, about the only thing they can't do is speak for you.



MacSpeech®

[www.macspeech.com](http://www.macspeech.com)

Available from Apple and other fine Macintosh retailers.  
Distributed by MacSense Australia, [www.macsense.com.au/macspeech\\_dictate](http://www.macsense.com.au/macspeech_dictate)

You can see each of the computers operating as part of that shared group, stream each others' contents, and drag and drop content from one library to another.

Users' interaction with the iTunes Store has been dramatically improved, with new artist pages, better navigation, new movies pages, and new TV pages. The artist pages have gotten a dramatic overhaul, with much more visual material added.

Music, photography, liner notes and essays are the centerpiece of the new feature, which Apple is calling iTunes LP.

iPhone and iPod touch application management, which has become a nightmare, particularly for those who have large numbers of apps, has also been addressed.

Apple's solution is the ability to organise your apps in iTunes rather than on your iPhone or iPod touch. A new interface lets you list your iPhone's home screen, rearrange the location of applications, search for apps, and more.

**iPhone 3.1.** Finally, Apple has released a minor update to its iPhone software. iPhone 3.1 rolls out some bug fixes in addition to extending the Genius media-recommendation algorithm to recommend iPhone apps to users. The update also beefs up the iPhone OS's ringtone capabilities.



## Touch comes to tablets

Tablets that combine traditional pen input with a multi-touch trackpad have just been introduced by Wacom.

In a move that will make tablets more attractive to users outside the graphics industry, the digital pads of Wacom's second-generation Bamboo tablets can be used in the same way as multi-touch trackpads found on newer Mac laptops.

Tapping on the digital pad with a finger will select an icon, open a menu or start an application. Using two fingers you can rotate an image, flip through a photo album or presentation, scroll through a blog and zoom in and out of a photo or map.

The pen would still be used when doing work that requires more accuracy.

Traditionally, the pen has been used by artists and photographers for tasks such

as drawing natural strokes and retouching images, but its use extends beyond that to add a signature or comment to any digital document, for example.

There are two products that combine pen and touch in this range:

- The medium-sized Bamboo Fun, which comes bundled with Corel Painter Essentials 4 and Adobe Photoshop Elements 6 and costs \$289; and
- The small-sized Bamboo, which comes with Ink Squared Deluxe and Photoshop Elements 6 and costs \$159.

There's also the Bamboo Pen, which is a more traditional tablet-only product, is bundled with ArtRage and costs \$99.

And rounding out the range is the Bamboo Touch – essentially a 125mm x 85mm trackpad (there's no pen input) that costs \$99.

[www.wacom.com.au](http://www.wacom.com.au)

## AUSTRALIAN MACWORLD PODCASTING FORTNIGHTLY

Messages from the magazine and online editors, the "beer o'clock" gabfest with IT writers, user tips from our Filemaker training specialist, and more.

Go to [www.macworld.com.au/podcasts](http://www.macworld.com.au/podcasts)

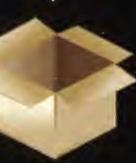


ur



2

\$



3



## Your iPhone Idea to Ca\$h Flow in three Steps

- 1 Bring your iPhone application idea to Zco
- 2 Zco develops, deploys & supports your app
- 3 Sit back and collect monthly checks

**Australian rep needed** The applicant will provide sales and technical support and work closely with Australian customers as well as Zco's global development facilities. [jobs@zco.com](mailto:jobs@zco.com)

Zco

20 years of providing high quality service

W W W . Z C O . C O M

Cancel      Menu      Done

- Navigate To... >
- Route Options >
- Mute Sound
- Night Colours
- 2D Map
- Advanced Planning >

### Satnav devices under threat

Portable satellite navigation devices are under threat from navigation applications on the iPhone and other large-screen smart phones, according to US research firm iSuppli.

Previously, it says, smartphones were not seen as a threat due to poor battery life, unclear pricing structures and small displays. But many of these issues have been or will be resolved, and the profile of phone-based navigation has been boosted by the launch of high-profile iPhone apps from TomTom and Sygic.

There are four theoretical user groups that make up the portable navigation landscape, iSuppli says.

- Low-end users: These users will probably transfer to smartphone navigation applications such as the iPhone, and will be willing to use scaled-down PND (portable navigation device) features.
- Moderate usage, but tech savvy users: They are likely to choose smartphone navigation applications over a dedicated PND to take advantage of the multi-function nature of the device.
- High-usage but price-sensitive low-end users: PND navigation vendors, iSuppli says, "will have to carefully position their smartphone products to ensure they do not compete against their own dedicated PND products". TomTom clearly is being addressed here.
- High-end PND users: This group wants sophisticated navigation features and "enjoys advanced driver-centric features". Members of this group who are more price-sensitive may migrate to an iPhone or similar handset, but dedicated users would stay with PNDs because of their advanced features.

The decision by Apple to support navigation apps from Sygic, TomTom and others is seen as prompting a significant shift in demand.

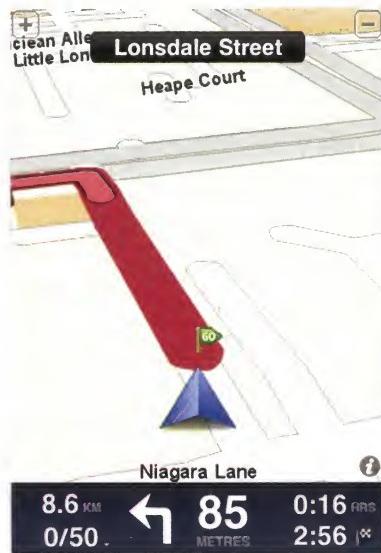
Apple has six onboard and two off-board real-time turn-by-turn navigation applications available on the iPhone around the world since launching the iPhone 3.0 operating system in June.

TomTom, however, says that it still sees robust demand for PNDs, and sees its iPhone app as an opportunity to grow, not a threat, especially in the short term.

iSuppli believes that in 2011, almost all smartphones will have GPS functionality, and users will be keen to use satnav on the devices due to better microprocessor support, higher internal flash memory and improved battery life.

By 2012, the company says, users will see the smartphone as a major navigation device, with feature sets and functionalities similar to mid-range PNDs.

iPhone navigation users alone are expected to increase from just 2 million in 2009 to 28 million in 2013. ☉





# MAC GEMS

The best in low-cost Mac software.

## MAILPLANE 2.0.10

[mailplaneapp.com](http://mailplaneapp.com)

## MAIL

Mailplane is a dedicated Gmail client that uses the magic of WebKit – the browser code on which Safari is based – to give you the Gmail interface in a stand-alone program. Gmail works here much as it does in your Web browser. But Mailplane's toolbar looks more like that of a traditional e-mail client, with buttons for Refresh, New, Reply, Forward, and more.

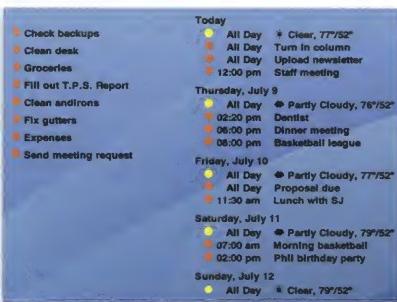
**Price: US\$24.95 (about \$30) standalone.**

## iDESKCAL

[www.hashbangind.com](http://www.hashbangind.com)

## BACKUP

Many Mac users track events and tasks using iCal, but you have to keep iCal running all the time just to see upcoming events and pending to-dos. iDeskCal is a clever solution that puts your events and tasks right on your desktop, so a quick glance – aided by Exposé if windows and apps are blocking your view – shows you what's happening.

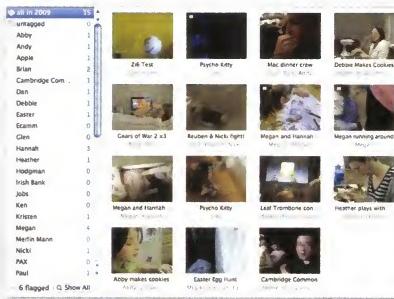
**Price: US\$12.99 (about \$16)**

## CLIPSTART

[www.riverfold.com](http://www.riverfold.com)

## VIDEO

With more people taking videos with compact video recorders – as well as with the iPhone 3GS – there's a growing demand for a way to organise those clips. Clipstart provides a library for storing video clips, letting you name and tag them, play them back, trim them, and upload them to video-sharing sites. It's basic and has a few rough edges but it serves a much-needed purpose. **Price: US\$29 (about \$35)**



## iPHOTO2TWITTER

[www.bluecrowbar.com](http://www.bluecrowbar.com)

## SOCIAL NETWORKING

iPhoto '09 users often use its integration with Flickr and Facebook, but sharing photos on Twitter is a bit more complicated. Blue Crowbar Software's iPhoto2Twitter 1.5 plug-in for iPhoto '08 and '09, however, lets you select a photo in iPhoto, publish it to Twitpic or MobyPicture, and then tweet the link.

**Price: £4.95 (about \$10)**

## DOCKS

[www.thoughtfultree.com/app/docks](http://www.thoughtfultree.com/app/docks)

## PRODUCTIVITY

As flexible as Mac OS X's Dock can be, one feature request that's been around as long as OS X itself is the capability to have multiple Dock configurations and to easily switch between them. Over the years, we've covered a number of utilities that provide this functionality, but our new favorite is Thoughtful Tree Software's Docks, mainly because of its ease of use and its clear and attractive interface.

**Price: US\$14.99 (about \$18)**

## I LOVE STARS

[www.potionfactory.com](http://www.potionfactory.com)

## iTUNES

This useful program puts iTunes' five-star rating scale in the menu bar, so you can view or set the currently playing song's rating. What makes I Love Stars so appealing are the little details such as the rating scale automatically hiding when iTunes isn't playing. After an unrated track has played roughly two-thirds of the way through, I Love Stars sounds an alert and flashes the rating scale to remind you to rate the track. Unfortunately, you can't assign album ratings via I Love Stars. **Price: free**



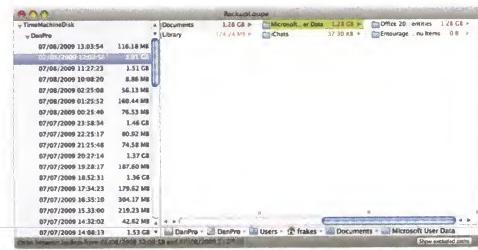
## BACKUPLOUPE

[www.soma-zone.com](http://www.soma-zone.com)

### BACKUP

Mac OS X's Time Machine backup feature automatically backs up multiple versions of important data on your Mac. But a regular complaint we hear from readers is that their Time Capsule or other hard drive has filled up and they can't figure out why. The very nifty BackupLoupe can help you find the answer.

When you launch BackupLoupe, you see a list of your Time Machine backup volumes, every backup instance for every computer, the total amount of backed-up data for each computer and, if you want, all the backed-up files. This lets you determine whether the backup includes large items or backups that you don't care about. And you can use it to exclude particular files from future Time Machine backups. **Price: US\$1.49 (about \$2)**



## fuel for your iPhone

Fuel is a soft-grip holster case built around a certified rechargeable lithium polymer battery.

Fuel is a complete solution for someone on the go!

### Specs:

- battery capacity: up to 2300mA
- battery charging current: up to 450mA
- battery max discharging current: 2A
- power consumption: 5v/2.5w



Napa or Carbon Fiber Leather over a Polycarbonate shell are Case-Mate's World Class Cases.

from RRP  
**\$49.95**

**Barely There** is Case-Mate's new line of protective covers, with Screen Protector incl. **RRP \$29.95**



**RRP \$119**



case-mate®

Distributed in Australia by

**WebEquip**

For reseller locations please see:  
[www.webequip.com.au](http://www.webequip.com.au)



# APP GUIDE

iPhone and iPod touch software that's caught our eye.

## GRAPHICS

When inspiration for an illustration hits, all you need is an iPhone or iPod touch, a copy of Brushes, and your finger. Steve Sprang's app packs a number of tools, brush sizes, and colors into an elegantly designed package that lets you sketch or paint anywhere, anytime. And don't think you need to have any artistic ability to use Brushes – it's fun at any level.

**Price:** \$5.99



## PRODUCTIVITY

Are you one of those people who sends yourself quick emails as reminders or to-do lists? InUse's MailMe does only one thing: It lets you send yourself an email in the fewest possible steps. No creating a new message, no selecting your address or typing a subject. Just open the app, type a message and send it. That's it. The note appears in your Inbox with your text appearing in both the body and the subject line. Perfect. **Price:** \$1.19



## SOCIAL NETWORKING

Tweetie is about as close to an ideal Twitter client as it gets for the iPhone and iPod touch. The social-networking app from atebits offers smooth scrolling, great handling of links within tweets, and best-in-class support for multiple Twitter accounts. Twitterific rivals Tweetie for overall elegance, but Tweetie edges it out with a smidge more of an intuitive interface.

**Price:** \$3.99



## SOCIAL NETWORKING

Facebook 3.0, the latest version of the iPhone application from the popular social networking site, adds a range of new features and enhancements including landscape mode, the ability to see upcoming events and RSVP, see friends' birthdays, see pages and post updates and photos to pages you administer, write notes and read friends' notes. Push Notification (see Page 58) isn't included, but is expected in the next update. **Price:** Free



## PHOTOGRAPHY

There's no version of Photoshop for the iPhone, but PhotoForge from GhostBird Software might be the next best thing. It offers a wide collection of image-editing tools and filters for improving photos or creating illustrations from scratch. This editing power comes in an elegant interface that makes it easy to find your way through the many tools.

**Price:** \$5.99



## SAFETY

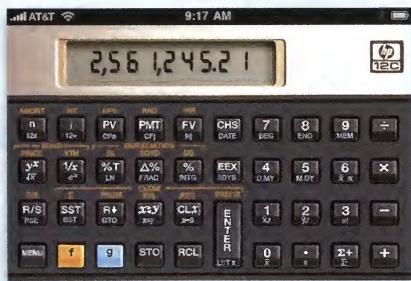
A great layperson's tool, the ResQr First Aid & CPR Coach offers helpful reminders to anyone with CPR or first-aid training who is faced with an emergency. A home screen of color-coded icons geared toward certain emergencies, and a series of Yes and No questions with treatment instructions depending on your answers, guides you through performing tasks in stressful situations. Just remember to call 000, not 911.

**Price:** \$7.99



All apps available from  
Apple's App Store through  
iTunes or directly from your  
iPhone or iPod touch.

## PRODUCTIVITY



Hewlett-Packard has come out with iPhone versions of its classic calculators, including this near-carbon-copy of the machine aimed at financial pros. Rotate your mobile device sideways, and you get a photographic recreation of the actual HP-12C, right down to the original color scheme. Every function and key is there, and it all works – and much faster than the original, thanks to the iPhone's speedy CPU.

**Price:** \$17.99

## MUSIC

Sonoma Wire Works' FourTrack is an amazing iPhone app for musicians, songwriters, or anyone who likes to record audio. The basic concept behind four-track recording is that you can lay down one track, such as a drum part or bass loop, then overlay a vocal, guitar, and other instruments to make a complete song. For capturing a quick song idea, or even creating a full song on-the-go, FourTrack is a must-have.

**Price:** \$12.99



**mac centre**

## Helpful Solutions Sales and Service



- Free Introduction to Mac classes Thursdays 5:30 - 6:30pm
- Gold Level Apple Authorised Service Provider
- Kerio Certified Partner
- Authorised Drobo Reseller
- Business onsite support agreements available

phone: 02 9281 4444

web: [maccentre.com.au](http://maccentre.com.au)

email: [info@maccentre.com.au](mailto:info@maccentre.com.au)



## MUSIC

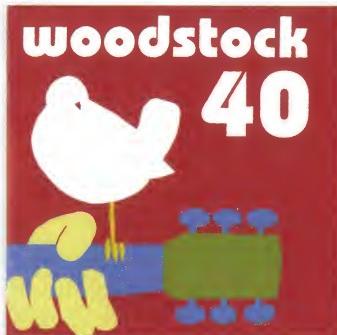


## MOVIES

## WOODSTOCK 40

By various artists  
Rhino/Warner

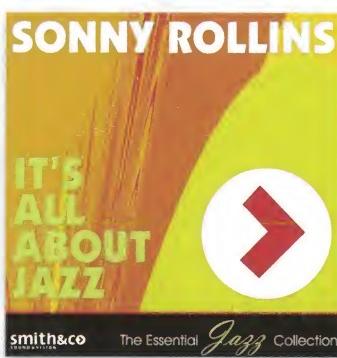
This excellent two-CD 40th anniversary set has the best moments from the 1969 Woodstock concert, and includes six previously unissued tracks including Creedence Clearwater Revival's *Bad Moon Rising*. Forget the recording quality – it's all about the groovy vibe from one of the best concert lineups ever. – DB



## IT'S ALL ABOUT JAZZ

By Sonny Rollins  
Smith & Co.

When a tenor sax player is named the greatest of all time by Miles Davis, you know he's something special. This album is a great way to discover 'Newk', containing some wonderfully executed tracks such as *Tune Up*, and Dizzy Gillespie's *A Night in Tunisia*. As with so many iTunes albums, there are no liner notes to be had, so we're unsure of session dates or who's playing with Rollins. – DB



## BEYONCÉ

I Am ... Sasha Fierce  
Columbia/Sony Music

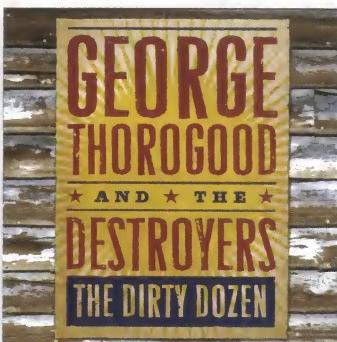
Beyoncé's latest is a two-disc album showing the juxtaposition between herself and her alter-ego. So disc one, *I Am ...* is a collection of soulful, introspective ballads including the hits *Halo* and *If I Were a Boy*. Disc two, *Sasha Fierce*, is more up-tempo, sexier and aggressive – typified by another hit, *Single Ladies (Put a Ring on It)*. It's slick and well produced, but a little patchy in places. – DB



## THE DIRTY DOZEN

By George Thorogood and the Destroyers  
Capitol/EMI

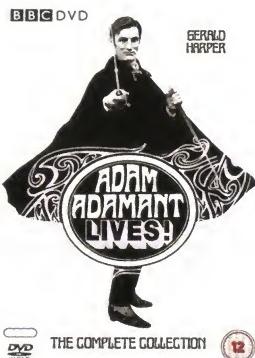
A new album by George Thorogood is always good news for blues-rock fans, and this is no exception – even if there are only six new tracks here and six 'classic fan favorites'. The album opens with two smokin' blues songs by Willie Dixon and 'Sleepy' John Adam Estes, and the rest is a real mix of blues and straight rock 'n' roll. – DB



## ADAM ADAMANT LIVES!

Madman

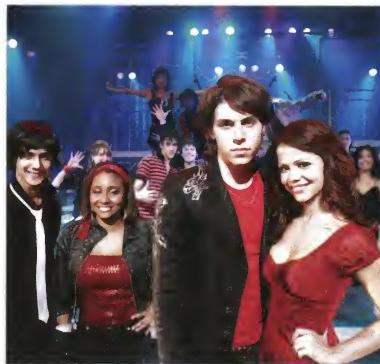
This is a five-DVD set of the cult 1960s BBC TV series about a dandy Edwardian adventurer brought back to life in swinging 1966. It's an incredibly cheesy sci-fi-ish version of *The Avengers*, but it has a charm that has made it a minor classic, and one of the inspirations for Austin Powers. – DB



## SPECTACULAR!

Madman

Starring *Home and Away*'s Tammin Sursok, this is a musical about a guy who can't decide where his priorities lie – with his fledgling rock career or with his high school show choir. Though it's not quite as polished as Disney offerings such as *High School Musical*, it will definitely appeal to fans of those movies. – DB





# GAMES

Reviews by  
Dave Bullard  
Chris Holt,  
Tim Mercer

## SUMMER HOURS

Madman

What happens when the last parent of a family dies, and the children must decide what to do with the house and a collection of highly valuable works of art? This sleepy but highly engaging French movie looks at this situation with a wry humour and superb acting from a cast which includes Juliette Binoche. – DB



## MY YEAR WITHOUT SEX

Madman

The mother of a normal Aussie family has a brain aneurysm and life is turned topsy-turvy for a year, not least because sex might trigger another attack. Footy, nits, work insecurity, tax evasion and other Aussie staples come to the fore in an enjoyable – and fairly black – comedy. – DB



PLATFORM: iPhone/iPod touch PUBLISHER: Capcom

*Resident Evil* is king of the horror survival genre. And now, the zombie-blasting franchise makes a near-flawless debut on the iPhone, thanks to efficient controls. The graphics are impressive too – at times, it's hard to believe you're playing *Resident Evil* on a mobile device and not a dedicated gaming console.

**Price: \$8.99** – TM



PLATFORM: iPhone/iPod touch PUBLISHER: 2K Games

The *Civilization* series has been fun to play through all its incarnations since 1991, and the latest version is no exception. It's tough to make a god-game work on a handheld, but *Civ Revolution* does the job really well. Explore the globe, build cities, research tech ... and beat the bejeebers out of your neighbours. There's room for improvement, but it's a great game.

**Price: \$5.99** – DB



PLATFORM: iPhone/iPod touch PUBLISHER: EA Games

*Mass Effect Galaxy* is a top-down shooter where you tilt the iPhone to move your character – super-soldier Jacob Taylor – around a map. He automatically locks on to and shoots enemies, but you can control weaponry and targeting. A narrative wheel interface lets you control part of the story. Good fun, and great cartoons. **Price: \$3.99** – DB

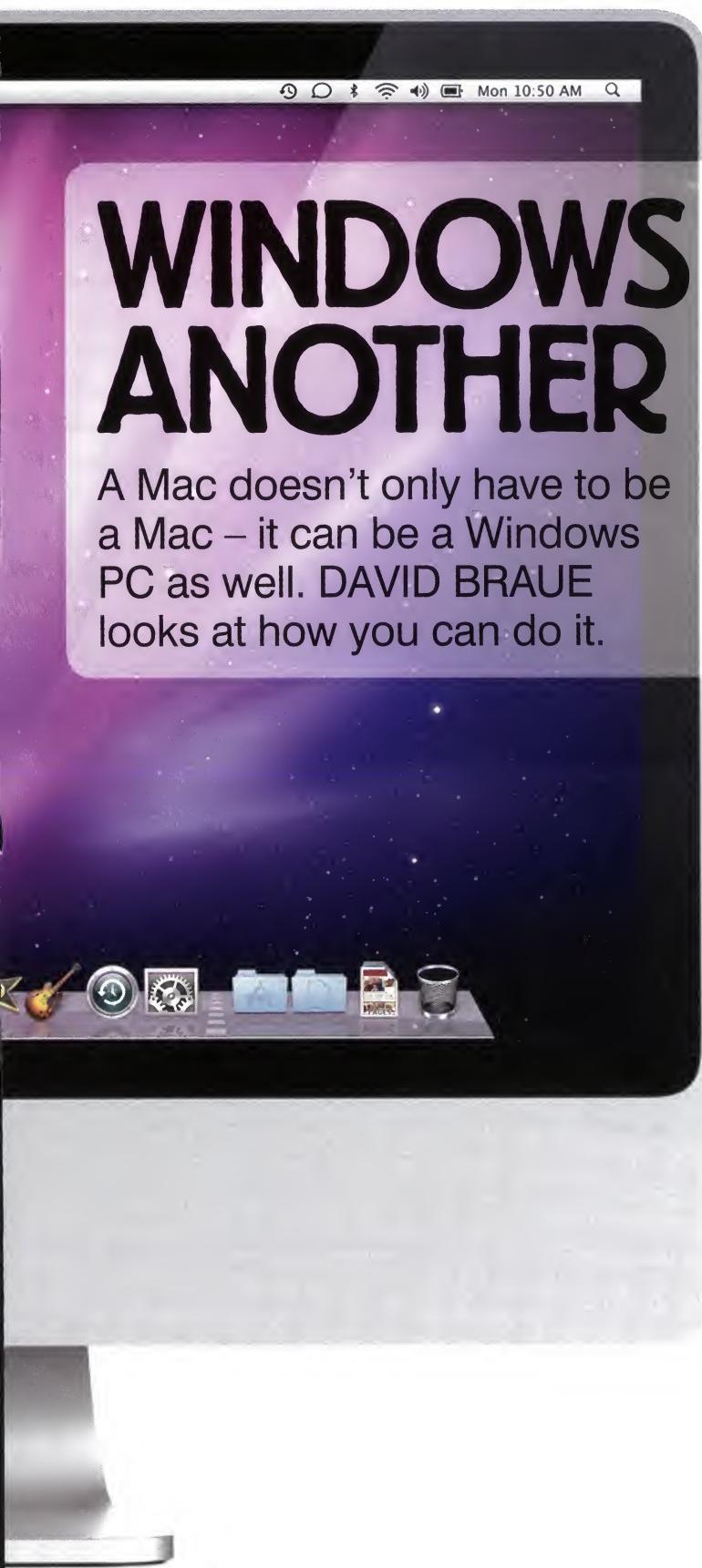


PLATFORM: iPhone/iPod touch PUBLISHER: Firemint

Firemint's *Real Racing* – an Aussie racing game that has some of the most beautiful graphics we've seen on the iPhone – is more than just visually stunning; it's also great fun. The controls take some getting used to, but the game's design offers more realistic racing and is more rewarding for dedicated players than most games of its ilk. **Price: \$12.99** – CH







# WINDOWS TO ANOTHER WORLD

A Mac doesn't only have to be a Mac – it can be a Windows PC as well. DAVID BRAUE looks at how you can do it.

**M**att Weisberg is a Mac user, but you might not know it by looking at the screen of his MacBook. That's because even though he made the jump to Macs a year and a half ago, Weisberg – the principal of identity and access management specialist Weisberg Consulting – had to bring a bunch of critical Windows applications with him.

Thanks to his use of VMware's Fusion application, doing so was a lot easier than he initially expected. Weisberg installed Windows inside a VMware Fusion 'virtual machine' (VM) that stays running on his Mac whenever he's using it. Using Mac OS X's Spaces feature, he can switch between his Windows and Mac OS X desktops with a keystroke.

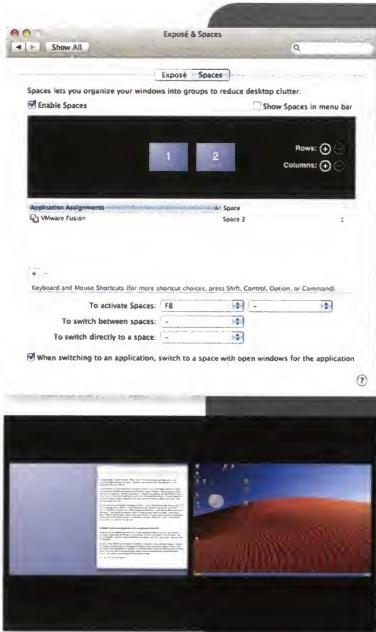
Maintaining a Windows desktop lets him use a host of critical Windows-only applications, including Internet Explorer, Designer for Novell Identity Manager, VMware's vSphere Client, the Novell GroupWise collaboration application, and a number of Novell and VPN clients that simply don't exist on the Mac.

"I use Designer all the time, and rely on it completely for my job," Weisberg explains. "There are no Mac-native equivalents to Designer and vSphere. And even though Designer is Java and Eclipse based, there are a few components that Novell has not ported to Mac OS X. I couldn't use a Mac without virtualisation."

Weisberg is one of a growing number of people who have made the jump to the Mac for its improved ease-of-use and stability, but need to drag Windows along with them. Fortunately for switchers, technological progress has made the process into something of a no-brainer. And with the recent introduction of all-in-one kits such as the Parallels Desktop Switch to Mac Edition – which bundles the popular Parallels Windows-on-Mac software with a file transfer cable and video tutorials – the process couldn't be easier.

## ARCHITECTURAL HAZARDS

For Windows users making the switch to Mac, being able to jump while retaining a well-understood and customised



## SIDE BY SIDE

Windows-on-Mac applications allow you to run virtual machines full-screen, with dynamic resolution changing so the Windows environment simply resizes itself to the full screen. But what if you want to build a separate Windows workspace and run it side by side with Mac OS X desktop? Thanks to Mac OS X's Spaces feature, doing this is easy. First, load a Windows (or Linux) VM in Fusion, Parallels or VirtualBox. Then make sure Spaces is enabled by starting System Preferences and clicking

**Exposé & Spaces**, then **Enable Spaces**. Create a new Application Assignment by clicking +, selecting VMware Fusion (or Parallels) and selecting Space 2 (or others if you have more than two Spaces) from the pull-down menu. If you want to use key combinations to switch between spaces, enter them. Close System Preferences. Now, tap F8 to activate Spaces, and you'll get an image of your Mac OS X desktop next to the Windows. Click on the image or use the arrow keys to select it and press Enter, and you'll switch to your Windows machine. Choose the full-screen option – normally this involves more than just clicking the green button – and you have your Mac and Windows machines running side by side. As long as Spaces is enabled, Windows should slide onto its own desktop every time you load it.

Windows environment is the perfect security blanket. But first, a bit of background.

To understand how virtualisation works, it's important to understand the relationship between applications, the operating system and the hardware they're running on.

Put simply, applications are sequences of instructions that use application programming interfaces (APIs) to tell the operating system what they want to do. This might include drawing something onscreen, sending information over the Internet, performing calculations using the system's memory, or a thousand other actions.

The operating system acts as a broker for those commands, balancing the requirements of its own functions – for example, updating the system clock, managing the

desktop layout, processing keyboard input, storing and backing up files, playing videos and more – with the requests it receives from running applications.

Some of these requests involve other operating system functions, while others might require the operating system to send instructions to the physical hardware of the machine. For example, sending data over the network requires the operating system to talk with the machine's Ethernet port. This sort of interaction is done using 'drivers' – specialised code that lets operating systems interact with physical devices in the same way that applications interact with the operating system.

Macs' long-term reliance on Motorola-based PowerPC chips, which are incompatible to the Intel x86 processors on which Windows runs, meant that it was previously impossible to run Windows without using an intermediate application like Connectix Virtual PC (subsequently bought by Microsoft). This emulator, and others like it, squeezed themselves between the application and operating system layers, running as a Mac OS app but acting like an x86-based system with enough fidelity that Windows would be fooled and run.

**It took just days for hackers to get Windows working on Intel Macs."**

The emulation approach worked – usually – but was also quite slow as the process of translating Windows application instructions into their Mac OS X equivalents guzzled processor power (Apple's Rosetta technology performs a similar task, converting Mac OS 9 API calls into their OS X equivalents so old applications can run in the new environment).

This slow performance was one of the main reasons hackers quickly got excited when Apple announced in January 2006 that it was shifting to Intel-based systems.

With the right tweaking, they reasoned, they could load Windows on an Intel-based Mac instead of Mac OS; as long as Windows had drivers to talk with the Mac's CPU and other hardware – which was ever more likely as Macs were shifting towards industry-standard components – Windows could load on an Intel-based Mac and run, happy as Larry.

They were right. It took just days for hackers, unified in efforts such as the open-source Xom project, to get this working. It couldn't have been much longer before Apple realised it had to contain this process before hacking of Macs got out of hand.

Thus was born Boot Camp, first launched as a separate program and then a built-in feature of the Leopard (and, more recently, Snow Leopard) versions of Mac OS X that allowed users to set up a dual-boot system that could start either as a Windows or a Mac machine.

Launched in April 2006, Boot Camp saved Apple the messy prospect of users wiping Mac OS X to run Windows, while creating a significant selling point because Windows users no longer had to give up their key applications when switching to the Mac. It was thus both a strategic and tactical move for Apple that ended up paving the way for a completely new market position for the company's PCs.

## GRADUATING FROM BOOT CAMP

Apple might have been content for Boot Camp to remain the only way of running Windows on Macs, since users would gradually have shifted to the Mac as they grew more and more accustomed to it.

However, for all its benefits – Windows runs at full speed under Boot Camp – the approach remains awkward and unwieldy. Because it repartitions the Mac hard drive, space allocated to Boot Camp – typically 40GB or more, to emulate a real Windows machine – becomes unavailable for use by the Mac system. Furthermore, it's been hard to move data between the Windows and Mac machines except via common external hard drives (this has changed in Snow Leopard, which includes drivers for the Mac's HFS+ file system that let the Boot Camp Windows machine read, but not write, files on the Mac drive).

Despite its revolutionary approach, Boot Camp rapidly faced competition from Parallels, which took a different approach by loading Windows directly into a VM that coexists with Mac applications on the Mac OS X desktop.

Soon after that, virtualisation pioneer VMware offered Fusion, kicking off a robust market that now has Apple's endorsement and now claims well over 5 million users.

"There are some users who want to keep Windows in a mental sandbox, and they shut it down when they're done – but more and more people just want to run them one alongside the other," says Pat Lee, US-based director of personal desktop products with VMware. "They understand the concept and the power of being able to run Windows



### above:

Boot Camp is a utility built into OS X that allows you to run Windows on a separate partition on your Mac's hard drive.



## Is this the Best Headphone in the World?

The story of the Sennheiser HD 800 began with a dream: of developing headphones that go way beyond conventional equipment to become music phones, or even perfect sound phones. The dream of creating a hi-fi device that sounds as brilliant, clear, and undistorted as if you were sitting right next to the source. The dream of creating an acoustic experience more incredible than anything ever heard through dynamic headphones: in spheres that no other category is capable of reaching - right there where perfection begins.

With a wide range of over 100 in-ear, compact and full size headphones, varying in price from twenty to twenty-five hundred dollars; choosing the correct model to suite your individual lifestyle, comfort level and budget is assured. As for the audio reproduction, rest assured that superb sound and hours of enjoyment will be experienced from the first time they are used.  
[www.sennheiser.com](http://www.sennheiser.com)

For more information please contact:

**Australia:** Syntec International Free Call 1800 648 628

**New Zealand:** Syntec International Free Call 0800 100 755

**right:**

There are a number of ways you can use VMware Fusion and Parallels Desktop to run Windows:

Here, Fusion is running Windows in full-screen mode (**top**), in a window while running OS X (**middle**) and in Unity mode (**bottom**), where you can isolate one Windows application and treat it just like any Mac application.



**A special mode – called Coherence in Parallels and Unity in Fusion – allows users to isolate one Windows application and treat it just like any Mac application.”**

side-by-side, and that has made this a very mainstream idea. Our goal is to make the whole process as streamlined as possible, minimising CPU usage so you can run Windows apps without affecting Mac apps.”

Like Virtual PC, Parallels and Fusion present themselves to the Windows instance as a full-featured Intel-based computer. Unlike Virtual PC, however, they are not emulating an x86 computer but actually redirect Windows’ system calls straight

past Mac OS X to the computer’s Intel hardware layer.

Elimination of emulation overhead means that both platforms provide good performance for most types of applications. Neither requires repartitioning the drive, as does Boot Camp.

Because VMware and Parallels compete head-to-head, steady development has quickly progressed the state-of-the-art: both have rapidly matured to the point where they can run pretty much any Windows application at speed (although performance does vary depending on the amount of RAM and other applications running at the same time). Performance can also be an issue when running complex Windows applications, as Weisberg found.

“Designer is a resource-intensive application and, compared to a Windows desktop, it is a bit slower,” he says. “But I never considered Boot Camp; I don’t like the dual-boot scenario because I always need to switch between OSes. And I’m willing to accept the performance trade-off.”

This trade-off can be minimised by adding more RAM; his 2.4GHz MacBook Pro, for example, has 6GB of RAM.

The applications’ internal drivers – which link the virtualised Windows environment to the Mac’s hardware – are regularly tweaked and optimised to boost performance. Hooks between the VM and Mac OS X allow Windows users to access files on the Mac host (which appears as the Z: drive in Fusion), and vice versa.

Additional capabilities enable seamless links between the Windows machines and Mac OS X desktop, including file drag-and-drop and cut-and-paste. And a special mode – called Coherence in Parallels and Unity in Fusion – allows users to isolate one Windows application and treat it just like any Mac application. This includes adding an icon to the Dock that loads the Windows application with a single click.

There are exceptions: programs that require specific timing, such as some corporate voice over IP and other communications-intensive applications, can struggle to compensate for the interruptions that virtualisation’s cycle-sharing imposes. And graphics-intensive 3D games and other applications, which require close interaction with Windows and the system hardware, aren’t always ideal in a VM.

Yet this barrier is rapidly falling, however, as both applications offer good emulation of the DirectX operating system services that Windows games use to handle their 3D graphics (Parallels also supports Windows applications that require the more broadly supported but less frequently used OpenGL standard).

For some users, the desire to play 3D Windows games leads to a compromise: install both Boot Camp and Fusion or Parallels, then switch between the two modes as necessary based on whether games must be played or quick and efficient work done; current versions of the applications can use the same Windows instance in Boot Camp and from Mac OS X.

This approach works for Shane Davis, manager of the Systems Group within Web hosting provider AussieHQ, who uses Parallels for running Windows applications like

VMware's Windows-only Virtual Infrastructure Client and the Windows-only drivers for the Panaboard interactive whiteboard.

Parallels also supports the occasional game of *Sim City 4* (which Davis says "plays as good as it ever did on my PCs"), but he switches to Boot Camp to enjoy more-demanding Windows games like *Need for Speed Most Wanted*.

## THE VALUE OF VIRTUAL

It's worth noting that Parallels, Fusion, and Sun's VirtualBox – a free and open-sourced alternative that can run Windows but offers fewer features – can all load Linux, Solaris and other operating systems just as easily as Windows. VMware, for one, claims Fusion supports 90 different operating systems, although not all have the same level of integration with Mac OS X as Windows does. For his part, Weisberg also runs SuSE Linux Enterprise Server and OpenSUSE Linux distributions.

Whether you're running Windows, Linux or something else, virtualisation offers several advantages over Boot Camp and the purchase of standalone machines. For example, it's perfectly acceptable to maintain different Windows configurations on one machine – an approach commonly used by developers wanting to test their applications in different environments.

Using Parallels to run Windows on the Mac has proved invaluable for developers needing to test client websites using the outdated but still-pervasive Internet Explorer 6 Web browser.

"There is still a massive following for this browser because so few people keep their Windows systems up to date," says Davis. "A VM is nearly the only way to test IE6 because new workstations all have Vista [and IE7]."

The multiple-VM approach is also used to manage desktops for multiple clients, or to isolate Windows applications that may not necessarily play well together. Importantly, virtual machines can be suspended at any point and resumed later, while Boot Camp cannot.

Many power users quickly come to appreciate other aspects of the virtual machine architecture, which stores all operating system and user data in a single file that can, depending on what's installed inside it, easily grow to 10GB or more. This file, although unwieldy, can be easily copied between systems, run from a USB drive, and backed up by Time Machine or other applications like any other file.

The portability of virtual machines is expected to make them the standard in many environments. Students, for example, can keep their entire Windows virtual machine and all their personal data on a USB drive and access it simply by plugging it into any Windows, Mac or Linux machine running the appropriate (and free) virtualisation software. A similar approach could assist highly mobile employees who regularly travel between offices and want to take their desktops with them.

For now, however, the biggest advantage of today's crop of Windows-on-Mac tools is simply that you can manage your exposure to, and dependence on, Windows so you only use it when you need it. With Snow Leopard now on the market and Windows 7 set to hit the streets this month (Windows 7 can already be installed in all VM scenarios but expect optimised drivers from Apple, VMware and Parallels either with or shortly after its launch) you can expect a high degree of discussion of the relative merits of Snow Leopard versus Windows 7; with a virtualisation tool in place, you can find out yourself. ↗

— DAVID BRAUE is AMW's online editor.



## WINDOWS WITHOUT WINDOWS

If your Windows requirements are truly minuscule, you may not want to shell out for a commercial package. In this case, it's possible to get many Windows applications running natively within Mac OS X without spending a cent – and without needing a copy of Windows.

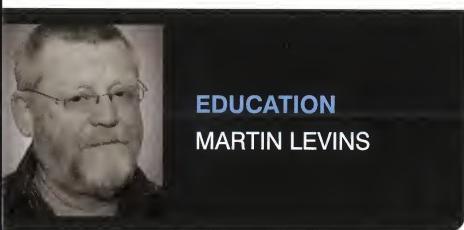
One option is to leverage the diligence of the developers of the open-source WINE ([www.winehq.org](http://www.winehq.org)) project. WINE was created years ago by a bunch of developers who believed Linux could supplant Windows as the desktop OS of choice if it could only run Windows applications. They emulated the entire Win32 API – the collection of interfaces that Windows applications use to talk to the Windows operating system – in Linux, translating those APIs into their Linux equivalents.

Darwine ([wiki.winehq.org/MacOSX](http://wiki.winehq.org/MacOSX)), the Mac OS X equivalent, was born years ago as a way of doing the same thing on Mac OS X. However, Darwine remains a

roll-your-own solution with online instructions that may be a bit scary for those who are not into development stuff. If this is you, consider shelling out \$US39 (about \$46) for CodeWeavers' CrossOver Mac ([www.codeweavers.com/products/cxmac/](http://www.codeweavers.com/products/cxmac/)), a packaged version of Darwine that officially supports most Microsoft Office applications such as Project, Visio, Quicken and others.

There is one more option that costs nothing. Free Linux distributions like Ubuntu ([www.ubuntu.com](http://www.ubuntu.com)) and Mandriva ([www.mandriva.com](http://www.mandriva.com)) come bundled with Wine. Load and run the free Mac OS X-native VirtualBox ([www.virtualbox.org](http://www.virtualbox.org)) virtual machine tool, then use it to install a Linux distribution and enable Wine running full-screen (instructions for doing this in Ubuntu can be found at [help.ubuntu.com/community/Wine](http://help.ubuntu.com/community/Wine)).

Voilà! You can run Wine-compatible Windows applications on your Mac OS X desktop, free of charge.



**EDUCATION**  
MARTIN LEVINS

**Hotlinks**

[www.apple.com.au/macosx/refinements](http://www.apple.com.au/macosx/refinements)

## Our new cat



A biggie for schools is that the need to buy QuickTime Pro seems to be a thing of the past."

The Leopard has indeed changed its spots. By now, you will know that Snow Leopard has been refined, not reinvented, and is oh, so white, but is it worth upgrading in education?

At \$39 for existing single-user Leopard installations, (although education volume purchasing prices were unavailable at the time of writing), the price seems right, as long as you have Intel processors on board (those who still run PowerPC machines such as the G4 or G5 – no Snow Leopard for you).

Personally, I believe that Leopard should have been called 'Snow Job', full of promise but not quite coming up with the goods. The lower-than-normal upgrade price lends weight to this theory.

Moving through the first few iterations to 10.5.4, when it became reliable enough to deploy, we wrestled with administrators whose accounts disappeared, parental controls that didn't work, Time Machine backups that failed, blue screens of death ... and so it went on.

The standard mantra – that bugs and missing features "will be fixed in Snow Leopard" was heard a lot.

A good example is the 'Services' entry in any Application name's menu, largely populated with greyed out options. Services now appear to work with a separate system preferences pane to prescribe which are available.

There are other changes, small perhaps, which reinforce that this is Leopard done right.

For example, disk icons are now hidden by default – you won't get that strange image of a bare hard disk on the top right of the desktop. I think this is a good thing – it wasn't helpful to the user.

Just over 30 seconds to boot demonstrates that the system honing and removal of code to handle PowerPC processors has been worthwhile.

There's been a lot of thought put into the upgrade process, which includes a software compatibility check that runs automatically to identify incompatible applications. These are now disabled and moved to an 'Incompatible Software' folder.

Applications are much smaller. Mail, for instance, shrinks from 289MB to 76MB, giving a default system install approximately half the previous

size, giving room for over 1000 more songs (or some work, I suppose).

A biggie for schools is that the need to buy QuickTime Pro, just to get creation of media rather than simple playback, seems to be a thing of the past.

In the copy I received, QuickTime 7 is only installed by default if an original QuickTime Pro is found, but you can get over this. The installer is available separately on the Snow Leopard DVD.

And what a nice piece of work the new QuickTime is!

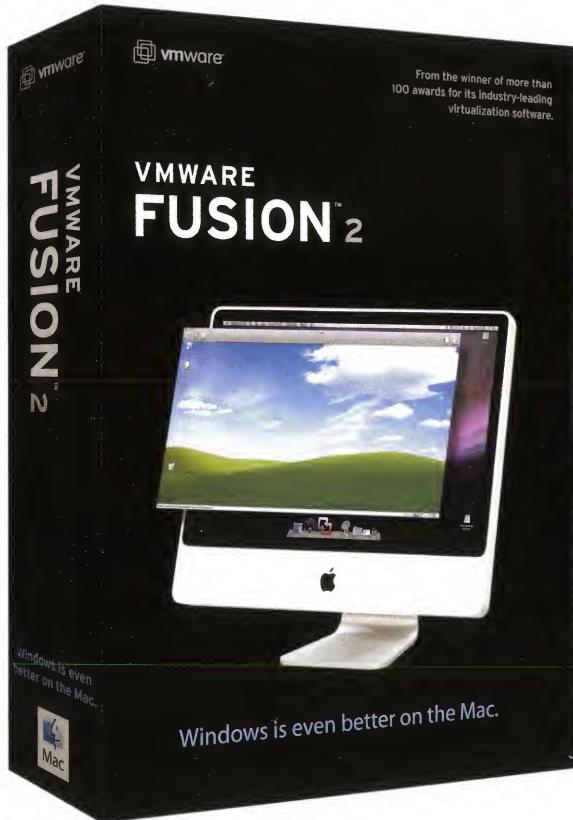
Finally, it can record the screen, with the same simple video editing interface as that on the new iPhone GS, and similar to that found in iMovie. The editing allows 'trimming' of excess pre and post-roll media by dragging a yellow IN and OUT marker to define the video to be kept.

Something that I have long been waiting to return has been the control of ad hoc networks.

The only way you could control this in Leopard was to prohibit access to the airport interface altogether, subsequently removing the ability to change to the home network after school. Now, an admin password is required.

On the new server we get push data and smart mobile access, allowing external iPod Touches and iPhones to communicate back to base without having to set up awkward Virtual Private Networks, and a much better organised 'separation of powers' for services such as mail and web servers on different machines.

I'll be installing it, on client and server, and will check out its collaborative services under load – but maybe when it gets to 10.6.4. ■



## Why VMware Fusion?

Thanks to its superior power, flexibility, and pedigree, VMware Fusion is the right choice for anyone looking to get the most out of their Mac by running Windows applications side by side with Mac applications.

### Proven

Winner of more than 200 awards for its industry leading technology and with 4,000,000 users worldwide, VMware puts a Mac-friendly face on datacenter-proven virtualization.

### Powerful

Based on the most advanced virtualization engine the world has ever known, the result of more than a decade of development, VMware Fusion brings all the power of VMware's enterprise-proven virtualization to the Mac. With powerful features like multi-CPU virtual machines—up to four virtual processors—large RAM virtual machines and 64-bit OS support, VMware Fusion is the most powerful way to run Windows, Linux, and more than 60 other operating systems on the Mac.

### Mac-native

Built from the ground up for the Mac, with a Cocoa-native user interface, VMware Fusion has the Mac-native features users expect. VMware Fusion fits like a glove with Mac OS X, from integration with Apple searchable help, and Quick Look for quickly browsing your virtual machine, to virtual machine file packages.

### Award-winning

In its first year on the market, VMware Fusion won more than a dozen industry awards, including the coveted Macworld Editor's Choice award, PC World's Top 100 Products for 2008, and Editors Choice Awards from Macworld UK, PC Pro UK, Redmond Magazine, and critical acclaim from industry publications like Macworld, Maclife, Mactech, Lifehacker, MacUser and more.

Learn more about VMware Fusion at [vmware.com/mac](http://vmware.com/mac).



Distributed by





**SOFTWARE**  
CHRIS OATEN

The problem with assessing antivirus software is that, even still, the prevalence of viruses that pose a threat to Mac users remains negligible. But, as you'll discover – or not discover, I hope – that's not the main problem.

It's a challenge to recommend AV software, and here's why: If you want to review word processing software, the task is simple. The assessment largely boils down to ticking off a checklist of features.

AV software, on the other hand, proves itself only when it actually detects something on your system that shouldn't be there. And if you're a Mac user, it can be an awfully long wait before AV software throws an alert at you.

This situation leaves you resentful of buying it in the first place. Worse, you get that nagging feeling that AV software is stealing precious CPU cycles that could perhaps be better utilised elsewhere.

It's a bit like travel insurance. You hate paying for it. You hate yourself even more when you get home and nothing's happened to justify the expense.

The system slowdown problem isn't the issue it used to be. Developers have been working hard to make AV software that doesn't choke your productivity.

Such was the case with iAntivirus from PC Tools. I've had this running on my iMac since January. Not once has it been a memory hog, peaking at about 12 percent of CPU but only when running a full scan of the hard drive. Otherwise, it runs at about one per cent in monitoring mode.

Installation was simple. It hasn't crashed once. The interface has a very Mac-like feel and, with a menu

## Yes, even Macs need security

bar widget, it's easy to get at if you want to manually invoke a scan.

Speaking of which, a quick system scan took a little under 10 minutes. A full scan (1,483,036 files) took about 110 minutes.

PC Tools claims iAntiVirus detects and removes viruses, spyware, keyloggers, Trojans and socially engineered threats which can

The screenshot shows the iAntivirus application window. At the top, there's a toolbar with icons for 'Scan my Mac', 'Protect my Mac. ON', and 'Smart Update'. Below the toolbar is a section titled 'Select an Action' containing two buttons: 'Scan my Mac' and 'Protect my Mac. ON'. Underneath this is a 'Status and Summary' section. It displays the following information:

Version is current	Product Version: 2008
Last scan was at: 2008/10/02 15:58	Engine Version: 1.00.3
Last update check: Never	Database Version: 2.0.7
<a href="#">Click here to manage Quarantine</a>	
<a href="#">Click here to view history</a>	

At the bottom of the status summary, there's a link: 'Free Edition, click here to upgrade now.'

### When I paid a visit to the site, my mac said 'Hello, Macworld' to me."

propagate without user awareness through instant messenger and P2P file sharing applications. You can use iAntivirus for free for personal use but if you want full support or to use it for business, it'll cost you \$49.95.

All of that is good, but it's not why I'm bringing iAntivirus to your attention. This is: Back in July, AMW contributor Neal Wise was telling readers about a Java vulnerability that meant that a remote user could subvert normal controls and execute binary code on a client system.

Translation? Bad guys could get into your Mac and do stuff you don't want them to. For such a thing to happen, a user would need to visit a web page in which the necessary Java code had been inserted. To demonstrate, Neal coded such a page and sent me the link to it. When I paid a visit to the site, my Mac said "Hello, Macworld" to me.

Seriously spooky stuff. I was left a little weak-kneed at the prospect that if this could be done, it surely could not be much more difficult to covertly take a peek in my Web Receipts folder to reveal sensitive data such as bank numbers and personal identity details. (Apple has since issued a security fix.)

What happened next was both comforting and disconcerting – iAntivirus popped up a quarantine alert. It had recognised the malicious code, given it a scalding, and sent it packing to Siberia, from where it was summarily executed.

Why wait so long to tell you about this? I wanted to wait to see if iAntivirus intercepted anything else. It didn't, largely because it's designed to tackle Mac-specific threats. I also wanted to see if its low system footprint was permanent. It maintained its minimal disposition.

So ... should you be running AV software such as iAntivirus? Murmurs I'm hearing tell me that the time has come for Mac users to cast off what has thus far been a lightweight yoke of complacency about security – especially web security, where intrusion methods can get around the fact you're running a Mac.

When software such as iAntivirus can be had for free, and barely rates a blip on the system resources radar, you have to ask yourself: Why the hell are you not wearing any protection? ☺

## Hotlinks

[www.iantivirus.com](http://www.iantivirus.com)  
[www.clamxav.com](http://www.clamxav.com)  
[www.intego.com](http://www.intego.com)

## FREE Digital TV Competition

### Win an Apple iMac with IceTV + EyeTV + Storage!

Valued at over \$2,500 all you need do is enter at [www.compnow.com.au](http://www.compnow.com.au)

Prize includes:

- Apple iMac 20" 2.66GHz
- IceTV 12 month membership
- EyeTV Diversity Mac TV tuner
- WD My Book 1TB Mac Edition

Competition closes 2<sup>nd</sup> Nov 2009\*







## FREE Pro Applications Seminar

Your whole business made easier on a Mac.

We'll be running demonstrations on :

- Final Cut Express
- Adobe CS4
- Aperture
- Filemaker Pro & Bento

**FREE** Saturday 17th October 9:30am to 4:30pm @ Malvern VIC  
Register today at [www.compnow.com.au/events](http://www.compnow.com.au/events).

**Computers Now** Apple On-Campus Reseller : **For Apple student discounts via our On-campus stores!\***

Doncaster	Westfield Doncaster	t: 03 9684 3688
Geelong	Westfield Geelong	t: 03 5223 1550
Malvern	1420 High Street	t: 03 9508 2600
Monash*	Campus Centre, Clayton	t: 03 9684 3655
RMIT*	Main Campus, Swanston St	t: 03 9654 8111
Sth Melbourne	64 Clarendon Street	t: 03 9684 3600

Crows Nest	222 Pacific Highway	t: 02 9951 7979
UNSW*	Main Campus, Randwick	t: 02 9385 2377
UTS*	235 Jones Street, Ultimo	t: 02 9951 7940

[sales@compnow.com.au](mailto:sales@compnow.com.au)



**Winter Catalogue OUT NOW! Massive savings and fantastic bonuses!**  
View online at : [www.compnow.com.au/catalogue](http://www.compnow.com.au/catalogue)

All prices include GST. Images for illustrative purposes only. Prices & specifications subject to change and stock availability. E&OE. [www.compnow.com.au](http://www.compnow.com.au).

Apple & the Apple logo are registered trademarks of Apple Inc. Microsoft Office, Windows, and iWork are all sold separately.

\*Full terms online competition closes 2<sup>nd</sup> Nov 2009. Prize drawn 9<sup>th</sup> Nov and announced 16<sup>th</sup> Nov 2009.

# SNOW LEOPARD WINDOWS 7

It's the battle of the operating systems as Apple upgrades OS X to version 10.6 and Microsoft undoes the damage done by Vista by releasing Windows 7. DANNY GOROG has been using both, and this is his verdict.

**I**t's a rare treat to get to feast on two brand new operating systems in one go. But that's exactly what we're getting now with the release of Windows 7 and Snow Leopard 10.6.

Both new operating systems come from two very different places but have a similar objective; to evolve the previous-generation operating system.

Let's not beat around the bush. Leopard has been an overwhelming success for Apple while Vista has been an overwhelming failure – particularly as far as enterprise users are concerned. Snow Leopard has been on the drawing board for years, and Windows 7 is a rush job, an attempt to coax the Windows faithful into upgrading, at long last, from Windows XP which is now nearly 10 years old.

But even though Windows 7 is a rush job (Microsoft likes to release updates every five years or so, and Windows 7 comes only three years after Vista), that's not to say that it's bad. In fact, in my testing, it's actually good – or much better than Vista, which already makes it generations ahead of Windows XP.

The other reality for both Apple and Microsoft is that computers and operating systems are now essentially mature products. The marginal benefit of a new operating system keeps getting smaller. Sure, the browser is better, but once you've got the file system, networking and security down pat, selling an upgrade to a consumer is hard work. You've really only got two options; improve the performance or update the look and user interface.

For Windows 7, improving the performance wasn't just a 'nice to have' option for Microsoft, but was the most important part of the upgrade. Vista was a dog on the same hardware that ran XP well, and consumers didn't want to have to buy new hardware to run Vista.

Also, since Vista's release, a whole new generation of laptops, called NetBooks have become a hit with consumers. NetBooks are stripped-down, under-powered laptops but consumers love them because they are cheap and portable. But they're generally so under-powered that running Vista on them was wishful thinking. Microsoft had to make Windows 7 work on NetBooks or it would be doomed to the same fate as Vista.

## UPGRADING

I'm pleased to report Windows 7 runs well on NetBooks which means you'll get better performance from Windows 7 than Vista on the same hardware. Unfortunately, upgrading to Windows 7 from anything but Vista will be nothing short of a nightmare for most consumers. When I say nightmare, I mean you'll need to wipe your hard drive and start again.

But will your current hardware be able to run Windows 7? Microsoft's official line is that if your computer is capable of running Vista than it'll be OK with Windows 7, and it has provided a small application called Windows 7 Upgrade Advisor that you can run on your PC to check. The program reports on compatibility issues and, if the issue can be solved with an updated driver the application will even tell you where to find it.



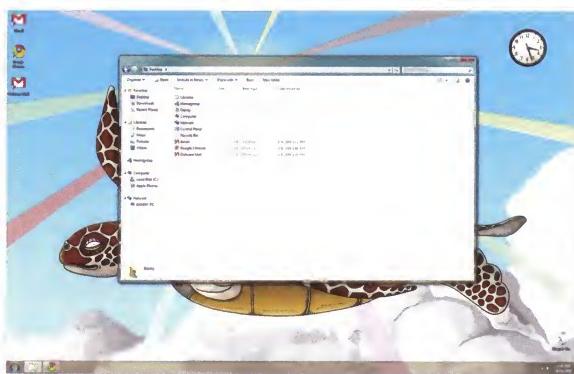
## Mac OS X Snow Leopard

The world's most advanced operating system. Just released.



**right top:**  
Snow Leopard finder.

**right bottom:**  
Windows 7 desktop.



## Snow Leopard has been built to run on Intel hardware."

While that sounds relatively straightforward, Microsoft does caution that "if you're running Windows XP, or any other operating system for that matter, we recommend that you experience Windows 7 on a new PC". Microsoft even provides a link to a website called 'The Laptop Scout' that will suggest PCs that might fit your needs. In general, as seems to be the case for most things, the upgrade path to Snow Leopard should be far smoother for Mac users.

You'll be able to upgrade to Snow Leopard from any version of OS X, but PowerPC users need not apply. Snow Leopard has been built from the ground up to run on Intel hardware. If you've got an older, PowerPC Mac and you want the latest and greatest, upgrade to a newer model.

According to Apple, installation of Snow Leopard has been "simplified, streamlined, and is up to 45 percent faster". It's also more reliable, and can even resume mid-installation should you have a power failure. Installation is also much smarter. For instance, Snow Leopard checks your applications to see if they're compatible, and, if not, will set them aside.

In addition, if you ever need to reinstall Snow Leopard, the installer can determine if updates have been applied, and if so will only reinstall the components that haven't changed. For Mac technicians, this can result in huge time savings.

Lastly, you'll actually reclaim space on your hard drive when installing Snow Leopard. Apple claims up to 6GB but your mileage may vary.

## THE BIG CHANGES

### DESKTOP & FINDER

#### Snow Leopard.

Don't be surprised if you upgrade to Snow Leopard and don't immediately notice cosmetic changes; they are subtle and hard to find. Apple actually pokes fun at this by saying "the all-new, exactly-the-same Finder". It's true too. If you're expecting a brand new Finder and Desktop, with a new look and feel you'll be in for a disappointment. The Finder is nearly identical in every way to the Finder in Leopard, except in terms of performance.

That's because Apple rewrote the Finder to take advantage of the latest Snow Leopard technologies including 64-bit support and Grand Central Dispatch; a technology that takes advantages of the multiple cores in your Intel processor. The end result is a Finder that is much snappier and better to use. (See 'Performance').

There are some slight changes that you might notice if you look hard. Like the ability to easily add the date to the top menu bar or the slider in each window that lets you dynamically adjust the icon size.

The dock looks the same but right clicking icons brings up a different pop-up menu, and clicking and holding an icon in the Dock invokes Dock Exposé; a function that highlights open windows for the app you've clicked on.

#### Windows 7.

In Windows 7 the changes are dramatic and immediate. It sports a retooled taskbar that has been completely redesigned to "help you work smarter, cut clutter and get more done". The taskbar now acts as a launcher and application switcher. In an obvious nod to OS X icons are larger and can be arranged with a simple drag and drop.

An Exposé-style mode has also been bundled into the taskbar; just click on the small button in the right hand corner of the taskbar to hide all open windows and show your desktop, or hover over the same button to make all open windows transparent. Hover your mouse over other icons in the taskbar and you'll be rewarded with a full-screen live preview of that window.

Another new feature called Jump Lists provides an easy way to see files you've recently used without opening the application. A simple right-click on an icon in the taskbar reveals a jump list that leads you straight to the documents you need. You can also add other files to the jump list (like templates, for example) so they're easy to open.

### PERFORMANCE

#### Snow Leopard.

Start-up time is one area where consumers notice improvements and both Apple and Microsoft know it. Mac users have been spoilt with Leopard – start-up, wake from sleep and shut-down are already good. But Snow Leopard makes them even faster.

Waking up from Sleep is almost instant, and booting is substantially better. But start-up and shutdown time is only one way to boost performance. Apple engineers have been hard at work making other improvements too.

For instance, all key system applications in Snow Leopard are now 64-bit, which means they can take advantage of all the memory in your Mac. You may not know, but 32-bit applications can only address a maximum of 4GB of RAM. 64-bit apps can address a theoretical 16 terabytes. Of course, nobody needs that much RAM now, but Apple are smartly positioning OS X as future-proof.

Don't worry, Snow Leopard is still 32-bit compatible, which means you only need one version to run both 32 and 64-bit applications.

Apple has also added two key technologies that mean big performance improvements in the future.

The first, called Grand Central Dispatch (GCD) is built in to the foundation of Mac OS X and allocates tasks across multiple cores and processors. In previous versions of OS X developers had to write their apps to specifically address different cores; a difficult and time consuming job, and one that saw very few developers take advantage of the multiple cores now built in to every Mac.

With GCD, OS X assumes responsibility for divvying out the workload to cores, and as a result every application can now easily access the power in every Mac.

The second key technology in Snow Leopard is called OpenCL, which lets developers use the processing power of the graphics processor of your Mac for any application.

## Windows 7.

One of the criticisms of Vista was slow boot times and Microsoft has made major headway in Windows 7. It's difficult for Microsoft to quote numbers as system specifications vary a great deal, but, according to Microsoft engineer Michael Fortin, "The top goal in Windows 7 was to significantly increase the number of systems that experience very good boot times. In the lab, a very good system is one that boots in under 15 seconds."

Your mileage with Windows 7 may vary, but you can be sure the performance will be an improvement from Vista.

Windows 7 ships as either a 32 or 64-bit operating system, so unlike Snow Leopard you'll need to choose one or the other. The general rule is that if your PC has a newer Core 2 Duo processor and you've got 4GB of RAM or more you should choose Windows 7 64-bit. Without the 64-bit version you'll be stuck at 4GB of RAM, and, even then Windows can only address about 3.3GB of it.

Installing the 64-bit version will also give you much better multi-tasking performance, and makes your PC more future-proof.

But unlike Snow Leopard, which is compatible with both 32 and 64-bit applications, the 64-bit version of Windows 7 can only run 64-bit apps, including all device drivers and applications. For all newer programs that is fine, but

if you've got an old printer or scanner you might need to check with the manufacturer before taking the plunge.

Like Apple, Microsoft is also building technologies designed to get more power out of the GPU, but this technology will come in Direct X 11 later this year.

## SAFARI V INTERNET EXPLORER 8

### Snow Leopard.

You don't need Snow Leopard to run the latest Safari 4, but thanks to the underlying technology in Snow Leopard, Safari is now even faster and more stable.

According to Apple, Safari 4 in Snow Leopard "delivers up to 50 percent faster JavaScript performance thanks to its 64-bit support. In addition, Safari is even more resistant to crashes. It turns out that the number one cause of crashes in Mac OS X is browser plug-ins. So Apple engineers redesigned Safari to make plug-ins run separately. If a plug-in crashes on a web page, Safari will keep running."

In terms of speed Apple claims that Safari 4 is up to four times faster than Internet Explorer 8.

## Windows 7.

Internet Explorer 8 includes a new Instant Search that finds results based on your search preferences and your browsing history to deliver results faster. Other features like Accelerators and Web Slices help you get relevant information faster.

## EXCHANGE SUPPORT

**Snow Leopard.** One big change that Snow Leopard introduces is native Exchange 2007 support out-of-the-box. That means you can plug your Mac into an Exchange 2007 network and configure Mail, Address Book and iCal to work seamlessly with Exchange. The irony is that Windows 7 can't even do this. Using the built-in Apple applications means you won't need to use the clunky Microsoft Entourage (part of the expensive Microsoft Office 2008 package) and you'll get all the benefits of using native Mac applications including 64-bit support, full Spotlight access and Quick Look for viewing attachments without opening them. I've been using Snow Leopard with an Exchange account and in my testing it works flawlessly.

**Windows 7.** No big changes for Exchange support in Windows 7. The message is still the same, if you want to use it, buy Office 2007.



## PRICE

**Snow Leopard.** If you're upgrading from Leopard, Snow Leopard will cost \$39 for a single-user licence or \$69 for a five-user Family Pack. However, if you're upgrading from any version older than Leopard, at this stage you'll need to buy the full version of Snow Leopard in a box set for \$229, which includes iLife '09 and iWork '09. A Family Pack is \$299.

**Windows 7.** The choices aren't nearly as simple for Windows 7. Microsoft has five different versions of Windows 7, but most users will likely choose Windows 7 Home Premium or Home Professional. Each version is subtly different and you need to be careful choosing.

If you're upgrading from Vista or XP, Windows 7 Home Premium will cost \$199, Professional \$399 and Ultimate \$429. If you're buying Windows 7 from scratch Home Premium will cost \$299, Premium \$449 and Ultimate \$469.



**left top:**  
Snow Leopard Safari.



**left bottom:**  
Windows 7 Explorer.

## GADGETS V WIDGETS

### Snow Leopard.

Widgets, (mini-programs like currency converters) were introduced in OS X 10.4 and remain largely unchanged in Snow Leopard.

### Windows 7.

Gadgets, the Windows Vista equivalent of Widgets, have stuck around in Windows 7 but are now more flexible and 'fun'. The sidebar has been exiled and now Gadgets just sit around on your desktop.

## BACKUP

### Snow Leopard.

Snow Leopard continues to build on Time Machine by providing faster, more reliable backups. Apple claims up to 50 percent speed gains, and even more if you're doing your first backup to a Time Capsule. However, it still doesn't provide the ability to fine-tune your backup.

### Windows 7.

Windows Backup and Restore is has been improved since Vista, and now sports more granular control and messages and descriptions written in plain English. Still, as a no-brainer backup solution, Time Machine is better.

## MEDIA PLAYBACK

**Snow Leopard.** Snow Leopard sees the introduction of the latest version of QuickTime, called QuickTime X. Perhaps the only new evidence of an interface change, QuickTime

X comes with a new player that uses the power of Core Animation technology to offer a clean, uncluttered interface with controls that fade in and out when they're not needed. In fact, the entire window structure fades away too; all you're left with is the movie playing on the desktop. It works wonderfully well.

QuickTime X is 64-bit and uses Grand Central Dispatch to deliver the best performance. The result is that QuickTime launches nearly three times faster under Snow Leopard.

### Windows 7.

Most editions of Windows 7 come with Windows Media Center, an interface that makes watching media simple. Windows Media Center also helps you watch media on other connected Windows 7 or Xbox 360 devices around your house with a new feature called Streaming.

In a similar vein to AirTunes, Apple's built-in streaming solution, Windows 7 lets you play music, movies or view images on other connected devices. But it takes it a step further with Windows 7 and allows you to turn on internet access to your home media.

Lastly, Windows 7 has built-in support for Touch. If you've got a touch-screen or a tablet style notebook you can use your fingers to control the interface. Touch support is also multi-touch aware so you can use multiple fingers.

## CONCLUSION

Windows 7 is a bigger and more important upgrade for Microsoft than Snow Leopard is for Apple.

Windows Vista was a failure, and Microsoft needed to address it, and address it fast. Windows 7 is the answer, and looks to have succeeded.

The question still remains: Are the new features and stability in Windows 7 important enough to get business and enterprise customers to finally ditch Windows XP?

Meanwhile, Apple is on a roll. Leopard is already the most successful Apple OS in history, and Snow Leopard will continue the tradition. There's no disincentive to upgrade; the price is right (if you're already running Leopard), the OS is stable from the word go and installation is a breeze. If you're not getting a new Mac, installing Snow Leopard is the next best option. In most cases you'll get better performance and free hard disk space in the process.

With features like full Exchange support Apple is attacking Microsoft where it hurts; the business market. For many SMEs buying a Mac with Snow Leopard will be cheaper than buying a PC with Windows 7 and Office.

Is Snow Leopard enough to get Windows users to switch to a Mac, and is Windows 7 a reason not to? Maybe.

But is Windows 7 enough to get Mac users to switch to Windows? No Way. ☺

**Windows 7 is a bigger and more important upgrade for Microsoft than Snow Leopard is for Apple.”**



**left top:**  
Snow Leopard  
QuickTime X.

**left bottom:**  
Windows 7 Media Streaming.



**Splicecom**  
**australia**

Defining next-generation communication

Splicecom Australia Tel: +61 2 9922 0988  
L4, 53 Walker Street info@splicecom.com.au  
North Sydney www.splicecom.com.au  
NSW 2060 Available Australia wide



Looking for a phone system  
that integrates perfectly with  
your mac computers?

**SpliceCom**  
Unified Communications

Use handset, Apple mac and iphone.  
Integrate with Address Book®  
FileMaker Pro®, Daylite® or any  
AppleScript® compatible application.  
Scalable to any size business.  
(also works with Linux & Windows)

**MacOptimise**

*your business  
your life*

Authorised SpliceCom Reseller  
Macintosh IT Support

# GADGET GUIDE

Gear, gizmos and goodies for your Mac, iPhone or iPod.



**↑ Canon SELPHY CP780.** There's a new SELPHY in town. The hot-pink CP780 is the smallest yet of Canon's range of compact photo printers. About the size of a lunch box, it prints to a variety of media, including 6x4in postcards with stamp and address details on the back. Print direct from a camera, insert a memory card or use the optional Bluetooth dongle.

**RRP: \$199**

Canon

[www.canon.com.au](http://www.canon.com.au)



**↓ iHome iP71.** We've had a sneak preview of these new speakers, and were impressed. The iP71 is a nicely designed made-for-iPhone two-speaker system that not only plugs into your Mac but also docks, charges and plays your iPhone or iPod. So you can use it at your desk or take it outside for your next spring barbie.

**RRP: \$299.95**

Conexus

[www.conexus.com.au](http://www.conexus.com.au)



**↑ Hitachi Deskstar 7K2000.** Hitachi is now shipping the world's first 2TB 7200-rpm hard disk drive. It has an ultra-quiet operation, 32MB cache and 3Gbps SATA interface. And despite being high-capacity and high-performance, it has 10 percent idle power savings over previous generations. And it's halogen-free.

**RRP: TBA**

Hitachi Global Storage Technologies

[www.hitachigst.com](http://www.hitachigst.com)



**→ AVerMedia AVerTV Volar M.** This is a USB high-definition TV tuner that lets you watch and record TV on an Intel Mac. Even better, the AVerTV for Mac software lets you time-shift and control your TV watching using the Apple Remote. It comes with a small antenna, but for decent results you need a rooftop aerial.

**RRP: \$115**

AVerMedia

[www.avermedia.com](http://www.avermedia.com)

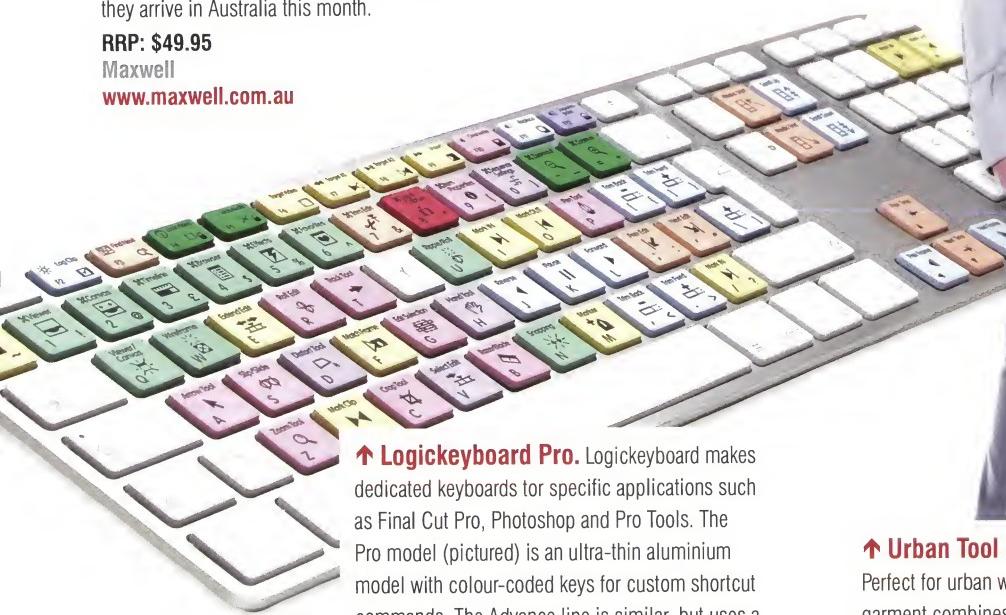


**↑ Joby Gorillatorch.** From the people who brought us the wonderful Gorillapod flexible tripods for cameras and camcorders comes the Gorillatorch. It's a simple idea – a torch mounted on a flexible tripod that can cling to anything or attach to a metal surface via strong magnets on each of the feet – but is so inspired that we can't wait to get one when they arrive in Australia this month.

**RRP: \$49.95**

Maxwell

[www.maxwell.com.au](http://www.maxwell.com.au)



**↑ LogicKeyboard Pro.** LogicKeyboard makes dedicated keyboards for specific applications such as Final Cut Pro, Photoshop and Pro Tools. The Pro model (pictured) is an ultra-thin aluminium model with colour-coded keys for custom shortcut commands. The Advance line is similar, but uses a cheaper printing method to keep costs down.

**RRP: Pro from \$229, Advance from \$179**

Corsair Solutions

[www.corsairsolutions.com.au/logickeyboard](http://www.corsairsolutions.com.au/logickeyboard)



#### **↑ Urban Tool businessHolster.**

Perfect for urban warriors, this unique garment combines utility with a wry nod to the under-jacket holsters worn by TV cops since Dirty Harry was a boy. The pockets can hold essentials such as USB sticks, business cards and pens, and there's a special iPod case with cable routing. Book him, Danno!

**RRP: \$139**

Urban Tool

[www.urbantool.com.au](http://www.urbantool.com.au)

SPECIAL  
DISCOUNT  
OFFER

■ Australian Macworld readers can receive a 15 percent discount on all Urban Tool products by typing "Macworld" into the coupon field at checkout in the online shop at [www.urbantool.com.au](http://www.urbantool.com.au)



► **YUBZ Talk Mobile handsets.** How cool are these? These retro handsets plug into your iPhone to give you a novel way of talking on the phone – and at the same time are said to reduce the levels of radiation reaching your brain. They're available in nine solid colours and 17 artist designs.

**RRP:** US\$39.95 (about \$48) + shipping

YUBZ

[www.yubz.com](http://www.yubz.com)



◀ **THE pod.** This Canadian invention is simple yet highly effective idea – a stable camera platform consisting of a lightweight beanbag with a standard 1/4in tripod thread. THE pod is available in three sizes for cameras from compact to long-lens SLR, each with a choice of centre or off-centre camera position (check the bottom of your camera to see where the socket is).

**RRP:** \$29.95-\$79.95

adeal

[www.adeal.com.au](http://www.adeal.com.au)



◀ **Bluelounge Refresh.** Compatible with over 1000 devices, the Refresh charging station charges up to four at the same time using the built-in connectors. It's fully customisable via two USB sockets and extra connectors for an additional 2000-device compatibility.

**RRP:** \$149.95

Try & Byte

[tryandbyte.com.au/](http://tryandbyte.com.au/)  
[bluelounge/Bluelounge\\_Stockists](http://bluelounge/Bluelounge_Stockists)



◀ **Sennheiser PXC-310-BT.** The new PXC 310 and PXC 310 BT (pictured) travel headphones from Sennheiser are said to reduce the background noise of trains or planes by up to 90 percent. The PXC 310 BT adds the new apt-X Bluetooth codec for wireless listening when you're on the move. Frequency response is 15Hz to 22kHz.

**RRP:** TBA

Syntec International  
[www.syntec.com.au](http://www.syntec.com.au)



← **Nikon COOLPIX S1000pj.** We can't wait to get our hands on this camera: It's a compact 12-megapixel Nikon with a built-in projector that lets you show off your photos or movie clips at sizes up to 40 inches and 2m away. The camera has a 28mm wide-angle 5x zoom lens and five image-stabilising features.

**RRP: \$699**  
Nikon Australia  
[www.nikon.com.au](http://www.nikon.com.au)



↑ **Unitek IDE to SATA HDD Docking Converter.** If you're in the position where you want to use an IDE hard drive with a SATA interface, have a look at the latest offering from Brando. The Docking Converter supports SATA plug-and-play, and delivers data transfer rates of up to 1.5Gbps.

**RRP: US\$16 (about \$20)**  
+ **US\$3 shipping fee**  
Brando  
[usb.brando.com.hk](http://usb.brando.com.hk)



→ **Elgato Turbo.264 HD.** This is a fast and easy way to convert HD camcorder clips and other video files to a format that can be played on an iPod, iPhone and Apple TV, and shared on the web. Easily crop, scale, trim, batch process, and merge multiple clips into one movie.

**RRP: \$379**  
Simms, Conexus  
[www.elgato.com/wheretobuy](http://www.elgato.com/wheretobuy)



→ **Acme Made Bowler Bag.** Acme Made is a company whose new 2am Collection brings a fresh, fashionable feel to the world of camera bags. Among them is the Bowler Bag (pictured), a padded, shiny wet-look bag made for DSLRs. It comes in navy, orange or red and can double as a very cool handbag.

**RRP: \$49.95**  
Maxwell  
[www.maxwell.com.au](http://www.maxwell.com.au)





**↑ Swarovski Space Violet.** This trendy pair of in-ear headphones has a polished stainless steel body and a high-quality fabric-type cable. The soft and flexible earpiece is made of transparent silicone and has fully faceted drop-cut Swarovski Violet crystals that glitter subtly on the outside.

**RRP: \$160.00**

Swarovski (1300 791 599)  
[www.swarovski.com](http://www.swarovski.com)



**↑ Freecom Mobile Drive Secure.**

This is an ultra-portable hard drive with a difference – the 2.5in 320GB USB drive is secured by an RFID locking system that can only be unlocked by waving one of the two credit-card-sized AES-encrypted keys over it. No card, no data – nice and simple.

**RRP: \$220.95**

Multimedia Technology  
[www.mmt.com.au](http://www.mmt.com.au)

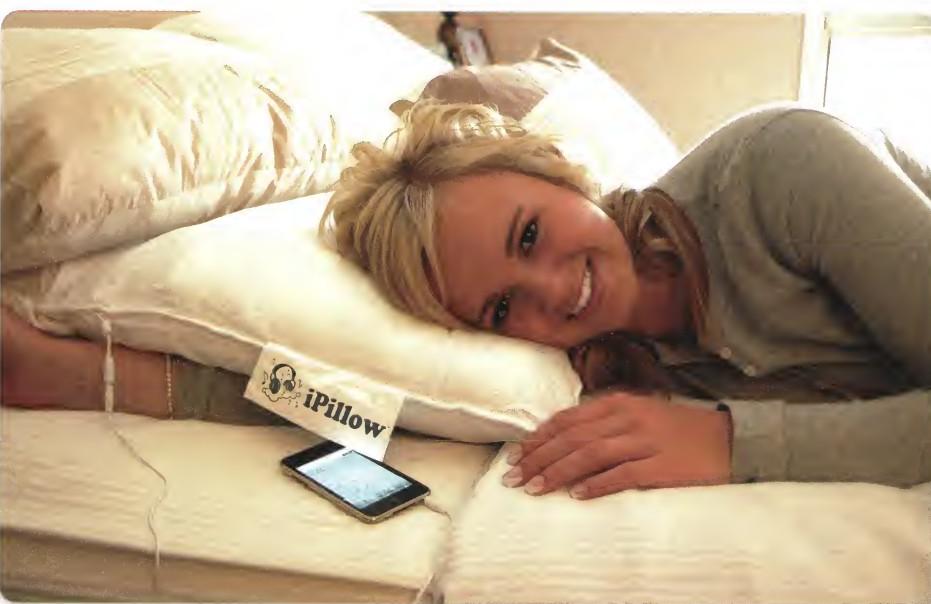


**→ Intova SS1000 Digital Sports Camera.**

This looks like a great alternative to buying a disposable waterproof camera for your next summer holiday. The SS1000 is a low-cost, 1.3-megapixel camera (1280x960 resolution) that you can take down to 15m. It has a 1.4-inch LCD viewfinder and takes micro SD cards.

**RRP: \$69.00**

Tasco  
[www.tasco.com.au](http://www.tasco.com.au)



**↗ LaCie Cozy.** Backup is hugely important, but what's also important is the need to keep your hard disks protected. LaCie has brought out three new ranges of cases: The hard-shell Cozy (pictured), the soft-case Cover and the Coat, which is a soft but bubble-protected case. All are available in 2.5in and 3.5in sizes.

**RRP: \$9.99-\$25.99**

LaCie  
[www.lacie.com](http://www.lacie.com)

**← iPillow.** The iPillow eliminates the need to wear headphones to bed by hiding two high-quality speakers within a comfy pillow. A 3.5mm headphone cord attaches the iPillow to any kind of audio device, including iPhones and iPods. The AMW staff thought it was a strange idea at first, but after trying them out can highly recommend them.

**RRP: \$89 + shipping**

Slake Audio Products  
[www.ipillow.com.au](http://www.ipillow.com.au)



◀ **Sony Cyber-shot TX1.** Fans of panorama photography will love the TX1's ability to automatically assemble individual frames at high speeds as you swing the camera across the scene. It's a 10.2-megapixel model with 4x optical zoom, and comes in black, silver, bronze, pink and purple.

**RRP: \$649**  
Sony Australia  
[www.sony.com.au](http://www.sony.com.au)

◀ **toffee sleeve.** Made from pebble-grain leather with a soft protective interior padding, toffee sleeves are designed to keep the MacBook Air, MacBook and MacBook Pros safe and snug. Covered by a one-year warranty, they're available in red, black, brown, green and pink.

**RRP: From \$99**  
toffee  
[www.toffee.com.au](http://www.toffee.com.au)



◀ **More-Thing Metallic Series Engraved Edition.** These classy cases for iPhone 3G/3GS are made of anodised plastic with a glossy metallic finish and a laser-engraved pattern. They're available in silver or titanium colours and in two styles: Stitch and Catena.

**RRP: US\$32.90 (about \$40) + shipping**  
More-Thing Company  
[www.more-thing.com](http://www.more-thing.com)



**SWITCHER SENSEI**  
DAVID BRAUE

Windows switchers invariably notice that a few things they took for granted on their Windows machine don't happen automatically on the Mac. Fortunately, by adding a few basic downloads to your machine, you'll quickly feel right at home.

The most obvious omission is the lack of support for Windows Media, which includes the WMV files used by a huge number of websites. Try to stream news from CNN.com or thousands of other sites, and all you'll get on the Mac will be a big black hole where the video is supposed to be.

Thankfully, this is easily fixed: get yourself a copy of the free Flip4Mac WMV Components for QuickTime ([www.telestream.net](http://www.telestream.net)) and your Windows Media woes will be instantly

## There's always a Mac app that works as well or better than the ones you were used to on Windows."

solved. This application adds WMV capabilities to QuickTime, the core multimedia handling system in Mac OS X, so any app will be able to play or stream WMA audio and WMV video files as if you were using Windows.

At the time of writing, a version of Flip4Mac for Snow Leopard was in Beta release.

Another big difference you will have noticed is how Mac OS X handles .ZIP files. Double-click on a .ZIP file in Windows (or the hugely popular WinZip) and you'll dig inside the archive. Double-click on a .ZIP file in Mac OS X and it will simply create a folder with the same name, extract all the files in the .ZIP archive into that folder, and stop. If you want to pick just one file from the archive, you'll

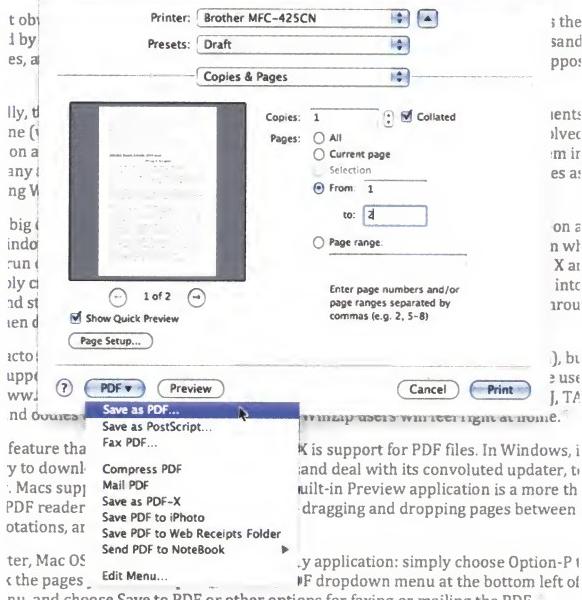
need to dig through to find it, then delete the rest.

The de facto standard archive handler on the Mac is the free StuffIt ([www.stuffit.com](http://www.stuffit.com)), but its format support is not complete. Your best bet to get back the .ZIP functionality you're used to is Zipeg ([www.zipeg.com](http://www.zipeg.com)), a freeware tool that supports not only ZIP but RAR, LHA, ARJ, TAR, the new 7z and oodles of other compression formats. WinZip users will feel right at home.

Another feature that works differently in Mac OS X is support for PDF files. In Windows, it's necessary to download and install Adobe Reader, and deal with its convoluted updater, to view PDF files. Macs support PDFs out of the box:

## Filling in the gaps

switchers invariably notice that a few things they took for granted on their Windows machine don't happen automatically on the Mac. Fortunately, by adding a few basic downloads to your machine, you'll quickly feel right at home.



the built-in Preview application is a more-than-capable PDF reader and includes features such as dragging and dropping pages between PDFs, PDF annotations, and more.

Even better, Mac OS X lets you save a PDF from any application (pictured left): simply choose Command-P to print, pick the pages to print, click the PDF dropdown menu at the bottom left of the Print menu, and choose Save to PDF or other options for faxing or mailing the PDF.

Another niggling annoyance is Mac OS X's handling of cameras. By default plugging in a camera causes iPhoto to load and show the screen from which you can import the pictures with a click. This may be fine at first, but if you add other photo management applications or want to be able to sync your iPhone without launching iPhoto, get the free Cameras ([www.flexibits.com](http://www.flexibits.com)), which lets you specify which application to open for each camera, USB stick, iPhone or other imaging device. Windows XP, of course, has had this feature since 2001.

There's always a Mac app that works as well or better than the ones you were used to on Windows.

Consider Handbrake ([www.handbrake.fr](http://www.handbrake.fr)) for converting media files; VLC ([www.videolan.org/vlc](http://www.videolan.org/vlc)) for playing video and audio files that haven't been imported to iTunes; Transmission ([www.transmissionbt.com](http://www.transmissionbt.com)) for BitTorrent usage; FileZilla ([www.filezilla-project.org](http://www.filezilla-project.org)) for FTP transfers, Firefox ([www.mozilla.org/en-US/firefox](http://www.mozilla.org/en-US/firefox)) for an alternative to Safari, Growl ([growl.info](http://growl.info)) for gorgeous application notifications; Twitterific ([www.twitterificapp.com](http://www.twitterificapp.com)) for Twittering; and Adium ([www.adium.im](http://www.adium.im)) for all-in-one instant messaging. ■



**"When only the best will do, buy Rocstor"**



### RocPro 225 - 500GB, 1TB, 1.5TB

#### Desktop and mobile 3.5", USB External Hard Drives

The new generation of Rocpro external SATA Hard Drives deliver extraordinary performance and reliability for both Mac and PC users. Specifically designed for demanding audio/video professionals, the new Rocpro 225 contains a fast SATA high capacity 3.5" drive in a stylish and unique aluminum case that can be stacked or mounted vertically. Features built-in power supply, fan-less and quiet operation plus carrying case.



### RocPro 850 - 1TB, 1.5TB, 2.0TB

#### 3.5", eSATA, FW 800/400 (1394b IEEE) and USB Hard Drives

The new generation of Rocpro external SATA Hard Drives deliver extraordinary performance and reliability for both Mac and PC users. Specifically designed for demanding audio/video professionals, the new Rocpro 850 contains a fast SATA high capacity 3.5" drive in a stylish and unique aluminum case that can be stacked or mounted vertically. Ultra quiet, The Rocpro 850 can be easily moved from one desktop environment to another using the provided carrying case.



### The ArcticRoc 2T

#### Tower RAID System - 5 Ports

The Arcticroc, a highly versatile RAID system is available in a 2-Bay model with up to 4 Terabytes of disk storage. The drives are Hot-Swappable, with transfer speeds of 3 Gbits/s to and from the host. ARCTICROC is also compatible with both Windows® and Macintosh® Operating Systems.



### The ArcticRoc 4T

#### Tower RAID System - 5 Ports

eSATA, FW800, FW400+USB

The Arcticroc is a highly versatile RAID system (Raid 0,1,5) that is available in a 4-Bay Tower model with up to 8 Terabytes of disk storage. The drives are Hot-Swappable, with transfer speeds of 3 Gbits/s to and from the host. ARCTICROC is also compatible with both Windows® and Macintosh® Operating Systems.



### RocPort ID3 - 320GB and 500GB

#### Mobile (Pocket) Hard Drives with a USB Port

Fully bus powered, Rocport ID pocket drives deliver outstanding performance and reliability, and available in multiple colors. Designed and engineered in the U.S.A. to meet the needs of the demanding mobile data storage market, the ROCPORT ID 2.5" external hard drive is compatible with both Windows® and Macintosh® environments.



### RocPort ID9 - 320GB and 500GB

#### Mobile (Pocket) Hard Drives - FW800, FW400 and USB Ports

Rocport ID pocket drives deliver outstanding performance and reliability, and available in multiple colors. Designed and engineered in the U.S.A. to meet the needs of the demanding mobile data storage market, the ROCPORT ID 2.5" external hard drive is compatible with both Windows® and Macintosh® environments.



### The AIRHAWK A3

#### Mobile (Pocket) Hard Drives with USB port 320GB and 500GB

Fully bus powered, The AIRHAWK pocket drives deliver exceptional performance and reliability. Designed and engineered to meet the needs of a demanding mobile data storage market.



### The AIRHAWK A9

#### FW 800, FW 400 and USB Ports 320GB and 500GB

Fully bus powered, The AIRHAWK pocket drives deliver exceptional performance and reliability. Designed and engineered to meet the needs of a demanding mobile data storage market.

Rocstor - Made in the USA.

#### AUTHORIZED RESELLERS:

My Mac Sydney  
Apple Premium Reseller  
20 Bronte Road,  
Bondi Junction, NSW, 2026  
(02) 8383 1600  
[www.mymac.com.au](http://www.mymac.com.au)

Coffs Computing Services  
Apple Authorised  
Reseller  
160a Pacific Highway  
Coffs Harbour 2450  
Ph: 02 6651 5655

Beyond the Box  
Apple Premium  
Reseller  
1 Puckle Street  
Moonee Ponds 3039  
Ph: 03 93728899

Lightforce Computers  
Apple Authorised  
Reseller  
1/10 Brigantine Street,  
Byron Bay, NSW, 2481  
(02) 6685 8796

Talk To The Mac  
Apple Authorised  
Reseller  
32 Grafton St,  
Cairns, QLD, 4870  
(07) 4041 6000

Xero Computing  
Apple Authorised  
Reseller  
106 Elgin Street,  
Carlton, Vic, 3053  
(03) 9347 1066

My Mac Melbourne  
Apple Premium Reseller  
172 - 192 Flinders St,  
Melbourne, Vic, 3000  
(03) 9662 9666  
[www.mymac.com.au](http://www.mymac.com.au)

# Media freedom

You have great music, movies and photos stored on your Mac, but think of how much better they'll sound and look when played through your home entertainment system. DAVE BULLARD checks out some of the options.

The Mac is a marvellous machine to use for collecting, storing and tweaking your multimedia files, but there comes a time when all that content needs to be freed from the shackles of a computer and viewed or listened to over a home entertainment system.

There are many, many different ways to achieve this, but here are just some examples. We'll be reviewing these options more thoroughly in coming issues of AMW – and we'll also be demystifying the world of cables so you know which are best for which jobs.

**Ratatouille**  
Disney • Pixar G

From Academy Award®-winning director Brad Bird (*The Incredibles*) and the amazing storytellers at Pixar Animation Studios comes *Ratatouille*, the original comedy about one of the most unlikely friendships imaginable. The film's protagonist is a rat named Remy (Patton Oswalt) who dares to dream the impossible dream of becoming a gour...

<b>Movie Details</b>	<b>Actors</b>	<b>Director</b>	<b>Producers</b>
Kids & Family	Patton Oswalt	Brad Bird	Brad Lewis
Released 2007	Brian Dennehy		
111 minutes	Brad Garrett		
<b>HD CC</b>	Lou Romano		
<b>★★★★★</b> (352 Reviews)	Janeane Garofalo		
	Peter O'Toole		

**Viewers Also Rented**

**Preview**      **\$3.99**      **\$4.99**      **Rent HD**

## APPLE TV

For those who may not know this Apple device, it's a wireless digital media receiver that not only streams your videos, music and photos from your Mac to your TV/home theatre but also allows you to watch or buy TV shows and rent high-definition (HD) movies. The 40GB model costs \$329, while the 160GB one is \$449. Its biggest strength is the fact that it integrates seamlessly and effortlessly with your Mac, but for my money it's an incomplete product without a digital TV tuner.





## GAMES CONSOLES

Chances are, if you're a gamer and you own a Mac, the dearth of Mac games means you'll be playing your games on a console of some kind. This also means you already own a great way of streaming music, videos and photos from your Mac to your home entertainment system.

There are a number of different ways to do this, but in my home setup I use Nullriver's MediaLink ([www.nullriver.com](http://www.nullriver.com)) for my Playstation 3 (above) and the same company's Connect360 for my Xbox 360. Both are US\$20 (about \$24).

As far as the Wii goes, have a look at Riverfold Software's Wii Transfer ([www.riverfold.com/software/wiitransfer](http://www.riverfold.com/software/wiitransfer)). It costs US\$19 (about \$23) and will let you use the Wii's Internet Channel to play the music, movies and photos stored on your Mac – with a few limitations.

## iPOD DOCK

Possibly the easiest way of getting music and movies off your iPod or iPhone and into your home entertainment system is to buy an AV dock such as the \$69 Apple Universal Dock or Belkin Power Dock (right), which will set you back about \$35. You simply plug the dock into a power outlet and connect it via AV cables to your home theatre.

If you're using an iPhone, be aware that not all docks support it; the Apple Universal Dock or \$39 iPhone 3G Dock seem to be the best choice for you.



## AIRPORT EXPRESS

This is a small Wi-Fi hub that is very simple to use. You connect it to your stereo or home theatre system and plug it into an electrical socket. It joins your wireless network and streams the music from your Mac. If you don't have a Wi-Fi network in place you can use the \$179 AirPort Express to create one. You can also use it for other uses such as remote printer sharing. See Page 71 for more details.



## PLUG YOUR IPOD STRAIGHT IN

What many people don't realise is that iPods and iPhones can be plugged straight into a home theatre receiver or television without the need for a dock. All you need is a 3.5mm-to-RCA cable that goes from the headphone socket to a composite AV input (which are typically colour-coded red and white for audio and yellow for video).

There are many of these on the market and, depending on the level of quality you're after, can range from about \$45 for a high-performance Monster or Belkin cable to a couple of bucks for an 'it'll do' cable from a two-dollar shop.



## PLUG YOUR MAC STRAIGHT IN

Depending on your Mac model, use one of Apple's video adaptors – such as a DVI-to-video or a Mini-DVI-to-video adaptor – to connect it via composite or S-Video cable to your TV or receiver. The audio will have to be output via a 3.5mm-to-RCA cable (see 'Plug your iPod straight in', above). The Apple adaptors will set you back \$25 with free shipping from the Apple Store.

There are also options such as Belkin's DVI-to-HDMI cables, which cost \$59.95 for a 3.6m length. Though HDMI usually carries audio and video, you'll still need to output the audio separately in this case.





# Sweet-sounding Parrot

Who said Bluetooth was no good?

The world is awash with iPhone/iPod speaker systems, but when we got the news about French company Parrot's new Zikmu speakers there were a few things about them that made us sit up and take notice.

First, the stunning design by Philippe Starck caught the eye. Then, while writing them up for last month's Gadget Central, I was taken by the simplicity of plugging your iPhone or iPod into the dock built into the top of one of the speaker columns, which then streams your music via Bluetooth to the other column.

You can also stream music directly to the set from your Mac using Bluetooth or Wi-Fi.

So when the *Macworld* team was invited to audition the Zikmu speakers by distributor MAXMEDIA, we immediately headed up to its funky new North Melbourne digs.

When we walked in there was beautiful music playing and stunning speakers dotted around, including the truly amazing Avantgarde Acoustic Trio Classicos (check them out at [www.avantgarde-acoustic.de](http://www.avantgarde-acoustic.de)).

The music was warm, full and powerful, and had a pleasing consistency as you moved around the room. You guessed it ... the sound wasn't coming from any of the high-end speakers, but from a set of waist-high Zikmus streaming music from a nearby MacBook.

To put it bluntly, put away any misconceptions you might have about streaming digital music – the Zikmus are a revelation, particularly at a sub-\$2000 price.

Parrot product designer Jean Etchebarre was there to talk about his babies, and said Starck was a delight to work with as he understands the practicalities of audio engineering as well as industrial design.

"The design pushed us to the technical limit," Etchebarre says. "But music is pleasure, so we had to make the speakers a pleasure to have in the room, too. You don't want something banal."

The speaker columns have an inverted horn shape, echoing a musical instrument. As you'd expect, the lower bell houses a downward-firing bass driver, while the medium-to-high frequencies come

**The sound is warm and full, with lots of detail."**



## Parrot 'Zikmu'

Parrot, MAXMEDIA,  
[www.maxmedia.com.au](http://www.maxmedia.com.au)

**Pros** Top design, room-filling sound

**Cons** None

**RRP** \$1999



via a set of flat NXT panels housed in the thin uprights.

The dipole design of the speakers means the rear-firing driver reflects its sound off the wall, creating a more immersive soundfield. This also means that the sound remains fairly consistent if you place the speakers in the centre of a room.

Having speakers firing to the front and rear also means the Zikmus can be placed in a patio doorway to deliver music both indoors and out.

At MAXMEDIA's loft showroom, MD Cameron Keating and Etchebarre stopped the playback from the MacBook and both paired their iPhones to the system via Bluetooth stereo – a simple, short process.

When a call comes in the music goes quieter, then comes back up to the previous level when you hang up.

If you'd rather go the dock route, your iPhone or iPod can be inserted into the top of the right-hand column and be charged while playing music.

The top of the left-hand column houses a set of touch-sensitive controls, and a small remote control rounds out the package.

As I said, the sound is warm and full, with lots of detail. The towers produce 50W RMS per channel, and Etchebarre pushed them to levels of 85–90dB with no distortion.

But it was at slightly lower levels and with male vocals emphasising the midrange that the Zikmus really shone, and having a glass of wine at hand and Clapton's *Layla* playing seemed a fine way to end the week.

**Australian Macworld's buying advice.** The Parrot by Philippe Starck Zikmu attracts you by its design and astounds you with its sound. At the price it should be very popular. ☺

— DAVE BULLARD



H Harman International



## We are family.

Compatible with:



**JBL® Multimedia** – Enthusiasts everywhere have experienced JBL sound in concert, on the road and at home. They know that wherever they are, they'll be able to enjoy the clear, powerful audio that can be found in many of the world's most celebrated cinemas, concert halls and arenas. Whether you're streaming audio on your computer, playing music downloads through a JBL docking system or headphones for iPod or iPhone, or just getting lost in the tracks on the latest CD from your favorite artist, JBL products are compatible with your life. To learn more, visit [www.jbl.com](http://www.jbl.com).

**CONEXUS** Distributed by Conexus [www.conexus.com.au](http://www.conexus.com.au) Ph 02 9975 0900

© 2009 Harman International Industries, Incorporated. All rights reserved. JBL is a trademark of Harman International Industries, Incorporated, registered in the United States and/or other countries. iPod is a trademark of Apple Inc., registered in the U.S. and other countries. iPhone is a trademark of Apple Inc. iPod and iPhone not included. "Made for iPod" means that an electronic accessory has been designed to connect specifically to iPod and has been certified by the developer to meet Apple performance standards. "Works with iPhone" means that an electronic accessory has been designed to connect specifically to iPhone and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards.

# Look sharp

Focusing is one of the most important fundamentals of photography. This month, iStockphoto's experts help you avoid blurring the lines.



When a photograph fails to work because of incorrect focus, it's because of one of three reasons: It's out of focus in general, being soft or even blurry; the camera moved during the exposure; or there is an area in focus, but it's in the wrong place in the image.

In these cases, the problems could have been incorrect shutter speed, subject movement or shaky hands.

## FOCAL LENGTH AND EXPOSURE

The rule of thumb is: your exposure time should be  $1/\text{XX}$  for the focal length XX for any given aperture. If you're shooting with an 80mm lens, your longest exposure for a hand-held shot would be 1/80th of a second.

This rule applies to full-frame cameras. For digital cameras with sensors smaller than 24 x 36mm (APS-C for example, with 1.6 crop), you need to multiply your focal length by the difference (1.6 in this case) and adjust your exposure time accordingly.

Note: this is a general guide only. Image stabilising (IR/VR) lenses will allow shooting at much slower shutter speeds, as will good posture and shutter-pressing technique.

## STEADINESS

Some people can stay very still, allowing them to shoot longer exposure times while holding the camera, but many can't. To compensate for any shaking, either adjust your exposure to bring in more light, bump up your ISO, open your lens or brace yourself.

The longer your focal length, the steadier you'll have to be. That's why a 24mm lens doesn't need any image stabilisation, and your favourite 300mm tele lens probably has it built in.

## COMPOSITION

Where do you want the viewer's eye to be drawn to on your image? This is your primary focal point and needs to be in focus.

Often an image is sharp in places, but will fail because some essential

part of the composition is too soft. Don't rely on your camera's autofocus. At times, this can choose a different focal point from what you had in mind, locking onto a different part of the frame and missing your primary subject. This is especially bad if you're working with a small depth of field.

New generations of digital cameras come with bigger maximum output files. At a certain size a minor focus misalignment, where the primary focal point may not be in the ideal place, can be tolerated as long as the overall image is sharp. However, if the overall focus is soft and the main focal point is away from the ideal compositional spot, the shot won't work. It's about overall context.

#### MOTION AND BLURS

There are always tricks, and what makes an image really work might



not always be 'correct'. Intentionally unfocused images, under the right circumstances, are acceptable. Again, it's all about context and execution.

Does it look good and make good use of the frame? Does it look attractive, or just incorrect? If there isn't a particular 'in focus' area, is the eye instead given a compelling direction to lead it through the image?

Panned images are an exception as they leave everything but the subject in focus by following your subject in action across the frame with a longer exposure time. Use camera focus IQ in servo mode for this technique.

You can also use a flash set to second-curtain sync so the flash shoots just before the exposure time ends, freezing the action and leaving you with the last moments in focus.

There are many great long-exposure shots of streaming water, motion-blur shots of people – anything that holds a message of motion or action works as long as the technique covers all bases.



**opposite page:**  
Selective focus is a fantastic way to present an original view of a scene.  
Photograph by Nikada

**top right:**  
Unsuccessful motion blur

**right:**  
Incorrect autofocus lock

#### PARFOCAL LENSES

Some of your zoom lenses might be 'parfocal', which means they stay in focus when the lens is zoomed.

#### FOCUS IS PURE MATHEMATICS

The bigger the resolution of a photograph, the less important 'super-sharp focus at full size' becomes. At XXXL-size photographs (21 million pixels), we need to look at them from a designer's perspective.

Does it really matter to a designer that a beautiful photograph be tack-sharp at 21 million pixels? It doesn't.

Printed on any offset press, the file will look incredible. Published on the web, the file will have been downsized so much that the focus will be perfect.

The progression in digital sensor technology is now being reflected in the iStockphoto inspection process. Instead of rejecting images for minor issues at such resolutions, we simply need to welcome the prettiest files. ☺

— *Written by iStockphoto's Gremlin, Sirimo, Rogermexico and JJRD. iStockphoto.com is the world's leading royalty-free stock destination.*




Only 60% of all files submitted make the cut. It hurts to be picky, but it's for the best.

Impressive royalty-free stock from \$1

## Camera Armor Seattle Sling

Camera Armor,  
[www.maxwell.com.au](http://www.maxwell.com.au)

**Pros** Watertight

**Cons** A bit small

**RRP** \$189



## Dry zone for camera gear

The keenest of photographers know that the onset of wet weather is no time to put their camera away. Problem is, water and camera gear don't mix very well. So a camera bag that can keep your gear protected from rain and spray is a useful, if not wise, investment.

The Seattle Sling Dry Bag from Camera Armor makes use of some well-established camping wisdom to protect its contents. Inside the bag is a removable heavy duty plastic liner with a top opening that folds over three times and which, in turn, is secured by buckles on each side of the bag shell plus a buckled strap. The Sling has a top flap that covers the liner for an extra measure of protection and is secured with a large velcro panel.

This method doesn't protect equipment as well as a gasket-sealed Pelican hardshell case, but I can tell you it's a lot more comfortable to carry around. The Sling has a messenger-style, single shoulder strap that makes it easy to switch between shooting and stowing. And there's a secondary strap that wraps around your body to steady it while you're on the move.

Some very slushy alpine weather and a deliberate hosing of the bag revealed it lives up to its claims of holding water at bay. However, I'd be fearful of dropping this bag in a body of water.

My only complaint with the Seattle Sling is that it's a bit small if you're using more than a camera body with a 70-200mm lens, a flash and the bare minimum of accessories. Also irksome was that the top flap is secured only by velcro, which loses its grip over time.

**Australian Macworld's buying advice.** Photographers after a bag that will keep their gear well shielded from inclement weather should be satisfied with the Seattle Sling, as long as they're using a kit of modest size. ☺

— CHRIS OATEN

## Great, inexpensive image editor

Simple software that Apple might make

Whenever a company releases a new image editor, people classify it as a 'Photoshop alternative'. I think that's an unfair comparison to both Adobe Photoshop and the application people are comparing it to.

Nothing is (or may ever be) as comprehensive as Photoshop, and don't think these companies think they will take on Adobe and win.

With that out of the way, let me say that one of my favorite apps is Saulius and Aidas Dailide's \$99.95 image editor Pixelmator ([www.pixelmator.com](http://www.pixelmator.com)). It is a great application that in no way competes with Photoshop for me. Each application has its uses and I like them equally for the job they do.

I've been using Photoshop for years and even though I'm not a professional user, I know my way around the application. When I have big jobs to do, there is no question that I'll use the full \$2000 Photoshop.

However, in my daily work, I often need to quickly resize an image for a story thumbnail or to put an image on a page. I started using Pixelmator

for daily tasks like this a few months ago, and I'm really impressed. The performance of the application is great and the developer has packed it full of the most common features.

For instance, Pixelmator has marquee tools, move tools, cropping, a Magic Wand, pencils, cloning, gradients, brushes, etc, etc. And that's just in the floating palette.

**Australian Macworld's buying advice.** Pixelmator is what I imagine Apple would make if it were going to create an image editor. It has an elegant interface, it's easy to use, powerful, and a steal at the price. ☺

— JIM DALRYMPLE

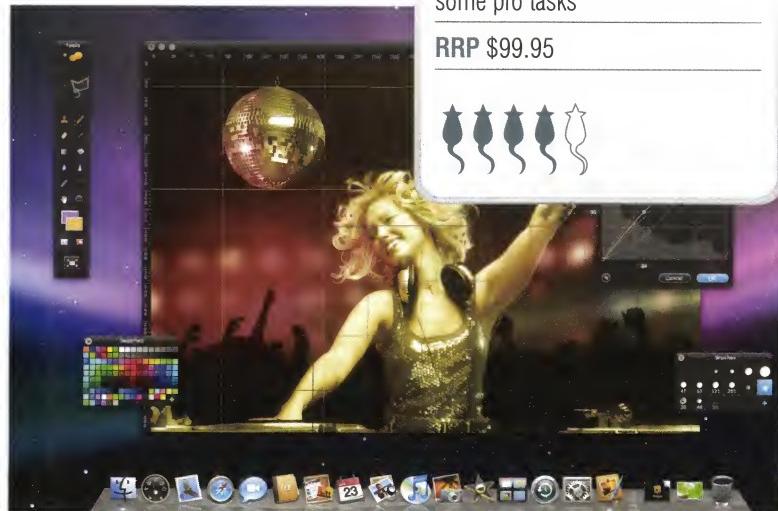
## Pixelmator

Pixelmator Team,  
[www.software-only.com.au](http://www.software-only.com.au)

**Pros** Cool interface and features, inexpensive

**Cons** Not powerful enough for some pro tasks

**RRP** \$99.95





1300 886 590

[www.corsairsolutions.com.au](http://www.corsairsolutions.com.au)



### logickeyboard™

Aimed at broadcasting, movie, video, graphics and audio editing. Logickeyboard have keyboards to support the following applications:

- Apple Final Cut Pro ◦ Apple Aperture ◦ Apple Logic Pro ◦ Apple Color
- Adobe Photoshop CS ◦ Adobe Premiere Pro CS ◦ Avid Media Composer
- Digidesign Pro Tools ◦ MOTU Digital Performer



### KEYBOARD PROMOTION

Save 50% on a Contour Shuttle Xpress (black) when you bundle with any Logickeyboard.



#### PRO Q

- Over 400MB/sec
- RAID 1/3/5 protection
- Up to 8TB
- Expresscard for portable use
- Snow Leopard supported
- Edit uncompressed HD

#### PRO DQ

- Over 800MB/sec
- RAID 1/3/5/6 protection
- Up to 16TB
- Expresscard for portable use
- Snow Leopard supported
- Edit multiple streams of 10-bit



### RAID STORAGE PROMOTION

Save up to \$1500

Purchase a Dulce Systems Pro-Q or Pro-DQ and get a FREE upgrade from 500GB to 1TB drives.

All promotions end 30/Nov/2009. E&OE.  
Expresscard option available separately



iPHONE

DANNY GOROG

One of the most important new features released in the iPhone 3.0 upgrade was the ability to receive 'Push Notifications', which allows any app to send a message to your iPhone even when the app is closed.

While Push Notifications can notify you in the background, it's still not the same as actually having an app. For one, Push Notifications only appear one at a time, and you can't get them back once a new one arrives.

Publicly, Apple's reason for preventing third-party apps running in the background has to do with preserving battery life. If an app is running in the background, by default it's consuming CPU cycles, and therefore consuming the battery. Other smartphone platforms like Android, Palm and BlackBerry allow background apps but most have difficulties managing power for that very reason.

Apple's approach with PN is that the iPhone maintains a persistent IP connection to Apple's server, and any third party app can channel a request, via Apple, to the iPhone. PNs, unlike push email, are available free of charge to all iPhone users,

As gentle as Apple claims PNs are on the iPhone's battery you'll still see a decrease in your battery life if you choose to enable them. It's also worth remembering that even if an app supports PN you can always turn them off if you don't want them.

Since Apple turned on the service, many application developers have integrated the functionality into their apps. Here are a few of my favourites:

#### Beehive \$12.99

The premier instant messaging application for the iPhone just got

## Time to get pushy

better with support for PN. You can log in, and stay logged in, to multiple IM accounts at once.

The real magic begins when you quit the app and the Push Notifications kick in.

Whenever someone sends you a message Apple's servers pop up a message on your phone which lets you load Beehive again and continue the conversation.

It's faster and more effective than SMS. Telcos, beware.

#### BNO News \$2.49 + \$1.19 per month for all notifications

Ever wanted to feel like you're in the middle of a newsroom? With BNO News loaded on your iPhone you are – it runs in the background and provides notifications for any major events.



## eBay just got even better with the addition of Push Notifications for outbid events and watched items

#### Twitbit \$5.99

The first full-featured Twitter client to come to the iPhone with Push Notifications. Twitbit alerts you whenever anyone mentions you in a tweet, or whenever you receive a direct message.

Twitbit also happens to be a really great Twitter client too and provides full support for all the normal Twitter functions. Unlike Tweetie, another popular Twitter app, Twitbit caches recently viewed tweets, useful for offline viewing.

#### eBay free

What started out as one of the least impressive apps in the App Store has

now become one of the best. And it just got even better with the addition of Push Notifications for outbid events and watched items.

#### Trapster free

Have you ever wished your phone would tell you about speed traps or red light cameras? With Trapster, your iPhone can. It uses the GPS in your iPhone to display a map with reported speed traps, red light cameras and other road traps.

You can also configure Trapster to send you Push Notifications within a certain radius of your location. If others report a new speed trap within the area, you will get a warning via PN. ↗

# Organise Your Mac

With the latest products from Try and Byte



Also holds the Mac Mini!

## Twelve South BackPack

**\$49.95 RRP**

This tiny shelf is out of sight



## Bluelounge CableBox Mini

**\$39.95 RRP**

Keep accessory cables tidy and dust free

Larger CableBox is also available for  
\$59 RRP

## Twelve South BookArc

**\$89.95 RRP**

Turn your laptop into a desktop



## Bluelounge CableDrop

**\$19.95 RRP**

Multi-purpose cable clips

## Coming Soon!

### Bluelounge Refresh

**\$149.95 RRP**

Charging station for 3 or more devices with: 2x iPod / iPhone, 1x mini-USB, 1x micro-USB plugs and 2x USB ports



Try and Byte products are available from all good Apple resellers and Apple retail/online stores.

For assistance in locating our products visit our website or give us a call.

E&OE. Prices and specifications subject to change without notice. Prices do not include delivery. Images for illustration purposes only.

Products Distributed by

**TRY&BYTE**

Unit 17, 6-8 Herbert St, St Leonards NSW 2065

Tel (02) 9906 5227 • Fax (02) 9906 5605

[www.tryandbyte.com.au](http://www.tryandbyte.com.au)

[info@tryandbyte.com.au](mailto:info@tryandbyte.com.au)

# Web browsing for the paranoid

How one security expert stays truly safe online.

**A**s a security analyst and researcher, I often have to visit some of the darker corners of the internet. To stay current on security issues, I must browse the sorts of websites no average person should go anywhere near – so I'm also far more likely to be targeted in an attack. That's forced me to develop a somewhat extreme approach to safer surfing.

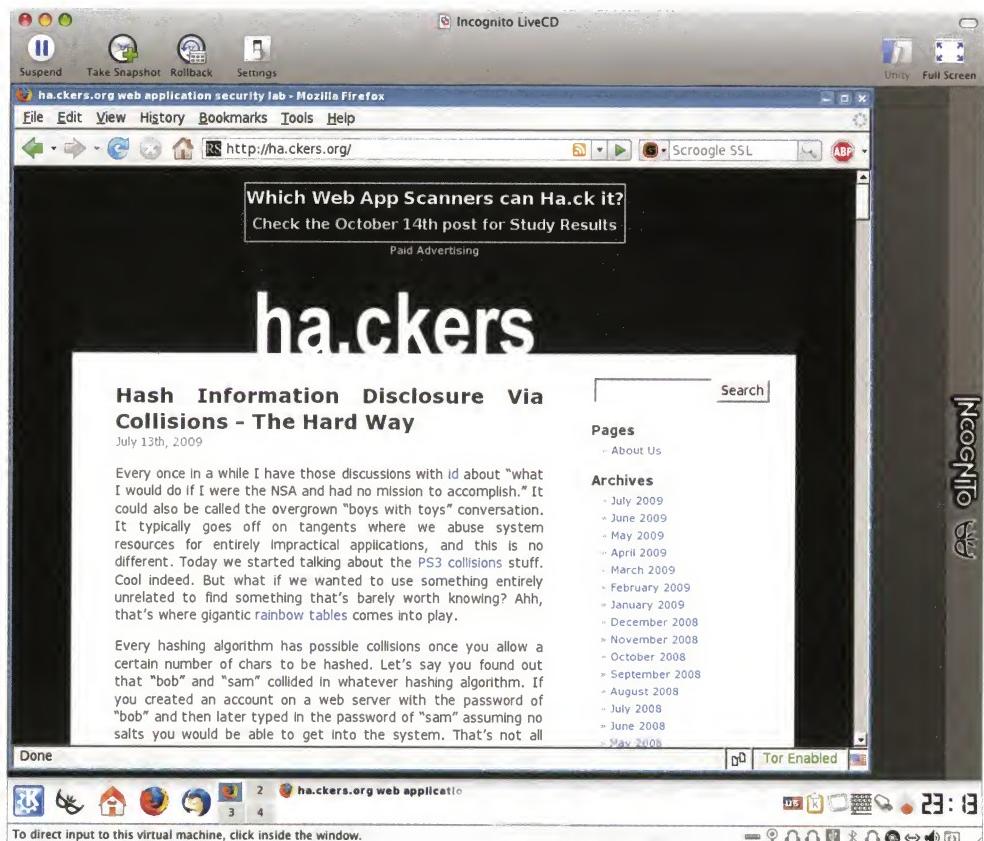
## UNDERSTAND THE RISKS

Web browser attacks fall into two general categories. The first target your browser. They use deceptive web pages or links to redirect you to undesired locations, to hijack browsing sessions, to download software to your computer, or to perform actions (such as forwarding your webmail to the attacker).

Browser-specific attacks include cross-site scripting (in which attackers insert malicious code into a web page you trust); cross-site-request forgery (in which the attacker inserts code in one web page allowing him or her to send commands, in your name, to another page); and click-jacking (in which programmers insert hidden buttons on apparently legitimate pages, in the hope that you'll inadvertently click on them).

The other type of web attacks exploit security flaws in your browser or its plug-ins (such as QuickTime or Flash) to attack your entire system. These attacks take advantage of buffer overflows and vulnerabilities that have long enabled viruses, worms, and remote attacks.

I use a multilevel strategy to protect myself from both kinds of attacks and to limit the damage if I do get attacked. That strategy begins with good password management; I rely on 1Password ([agilewebsolutions.com/](http://agilewebsolutions.com/)



products/1Password) for that. But I go much further: I also use multiple browsers and even operating systems to keep myself as safe as possible. Even if you don't visit the kinds of sites I do, some of these precautions could be useful to you, too.

## MULTIPLE BROWSERS

My first line of defence is to use different browsers for different sites. That way, if an attacker compromises a web forum that I log in to, he or she can't compromise my online banking from there, because I use a separate browser for that.

For general browsing and for commerce sites such as Amazon ([www.amazon.com](http://www.amazon.com)), I primarily use Firefox 3.5 ([www.mozilla.com](http://www.mozilla.com))

configured with the NoScript (noscript.net) plug-in. By default, NoScript disables Java, Flash, and other dynamic content often used in attacks. Because it's nearly impossible to attack a browser that doesn't run scripts or plug-ins, NoScript is very effective as long as I don't accidentally authorise anything malicious.

Because Safari is harder to lock down than Firefox, I use it for sites that are neither sensitive nor risky, such as Wikipedia ([www.wikipedia.org](http://www.wikipedia.org)), Pandora ([www.pandora.com](http://www.pandora.com)), and Apple.com ([www.apple.com.au](http://www.apple.com.au)). Under Preferences > General, I disable Open 'Safe' Files After Downloading, and under Preferences > Autofill, I disable User Names And Passwords.

By default, both Firefox and Safari will try to identify and avoid

above:  
**Incognito Virtual Machine** For the ultimate in safe browsing, run a browser in a different operating system from a live CD.

known fraudulent sites using public blacklists. In Firefox, go to Preferences > Security > Block Reported Attack Sites; in Safari, go to Preferences > Security > Warn When Visiting a Fraudulent Website. I leave these settings activated.

### DEDICATED BROWSERS

For riskier or more sensitive sites, I use either a dedicated browser or a site-specific browser (SSB).

By 'dedicated browser', I mean a regular Web browser that I use only for one site. For example, I use OmniWeb ([www.omnigroup.com/applications/omniweb](http://www.omnigroup.com/applications/omniweb)) for my company website.

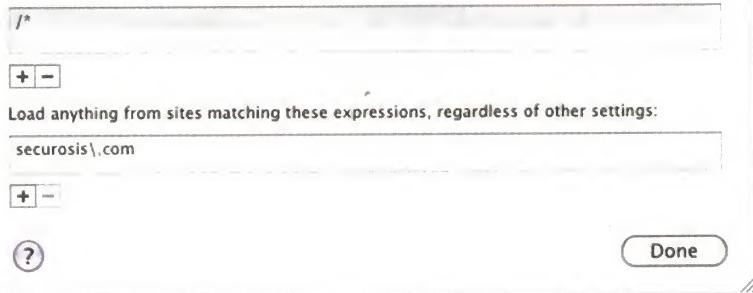
**My first line of defence is to use different browsers for different sites. That way, if an attacker compromises a forum that I log in to, he or she can't compromise my online banking from there."**



top right:  
**OmniWeb Settings.**  
OmniWeb lets you create sophisticated rules regarding which sites the browser can and can't visit.

right:  
**NoScript.** With the NoScript Firefox plug-in, you get fine-grained control over when and how Web-based scripts can run.

### Don't load anything from sites matching these expressions:



I've implemented rules in OmniWeb to keep it from accessing any site outside my corporate domain: In Preferences > Ad Blocking, I clicked on Edit The Blocked URLs List. In the top window that lists blocked sites, I added a rule for `/*` to block every website. In the bottom, trusted-sites window (which overrides the blocked-sites list), I added `securosis.com` to allow anything from my site. Those windows support complex regular expressions, so you can create some sophisticated rules.

For really sensitive sites or sites that I don't trust at all, I use an SSB. That's essentially a stripped-down web browser that I can create in a few clicks. I created one with the Prism ([developer.mozilla.org/en/Prism](http://developer.mozilla.org/en/Prism)) add-on for Firefox. (Go to Tools > Add-ons > Get Add-ons, search for Prism, and then install it.) With Prism installed, browse to that site and select Tools > Convert Web Site to Application.

This creates a browser application that will work only with that site. Unlike a dedicated browser, an SSB lets me browse to other Web sites. But because an SSB is a completely separate process, I can restrict its Web access using the Little Snitch ([www.obdev.at/products/littlesnitch/](http://www.obdev.at/products/littlesnitch/)) outbound firewall. If someone attacks the SSB, they can't touch my other browsers or steal my browsing history, except for the SSB's.

### MULTIPLE OS

For really risky or sensitive sites (such as my online bank), I go one step further: I use entirely separate

operating systems running as virtual machines (VMs) in VMware or Parallels. For example, for online banking, I use Microsoft Internet Explorer 8 running on the latest release candidate of Windows 7. IE 8 on Windows 7 is very secure – especially because I don't use it to visit any websites other than my banks, nor do I use the VM for e-mail or other internet activity. That eliminates all possible browser attacks (unless my bank itself is compromised); an attacker would need to completely take over my Mac in order to get my banking information.

For maximum browsing security, I use the Incognito ([anonymityanywhere.com/incognito](http://anonymityanywhere.com/incognito)) Linux live CD in a VM. A live CD runs the OS from the optical drive, without installing anything on the hard drive. The VM runs everything in memory without touching the local file system (except for virtual memory).

An attacker could completely compromise and control that VM, but he or she couldn't touch anything else on my system. The state of the VM is never saved to disk, so all I have to do to return to a pristine, clean image is to shut the system down and reboot.

Granted, my chosen profession requires me to take more precautions than the average user. But these tricks – NoScript, dedicated Web browsers, SSBs, and virtual machines – could still be useful for anyone concerned about security. ↗

— RICH MOGULL is a security analyst at Securosis.com

**Liquid Digital reader tip:**

## CUSTOMISING ON THE CHEAP

You don't need applications like DragThing and Overflow to customise your Dock, you can easily do it without them. I have simply created a 'Dock Items' folder in my personal Documents folder (I keep my personal documents separate from those the OS stores in the default Documents folder), and in that folder I have created sub-folders containing aliases for the items that I want easy access to, organised as I want them to be and using icons that I have created or chosen myself.

I have then put these sub-folders in the Dock in the normal way, enabling me to use the Dock to quickly and easily navigate to whatever file, folder, or application or I want to use or access, and to modify my Dock organisation simply by modifying my Dock Items folders, usually by opening them from the Dock itself.

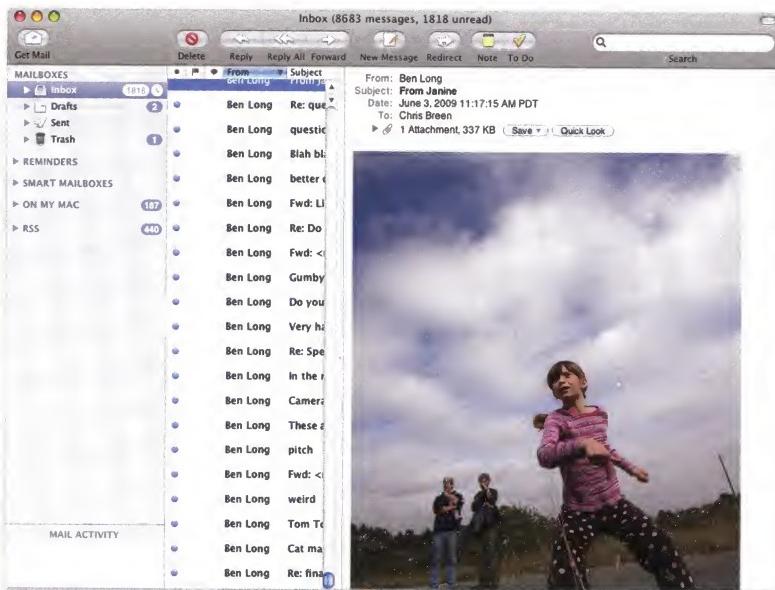
*Peter Schaper,  
Biggenden, QLD*

Each month, Liquid Digital gives an aAgent V5 webcam valued at \$119.95 to the Australian Macworld reader who submits (via email or the Australian Macworld website) the best and most useful tip. Preference will be given to undocumented tips but it is not an exclusive condition.

The sleek, sophisticated aAgent

V5 webcam from Liquid Digital is compatible with all Macs (OS 10.4+) and is the perfect choice for the design-savvy Mac user. The latest V5 model features full-HD 1920 x 1080 2-megapixel quality. With a five-layer German quality glass lens, an ultra-light, low-light sensor and an enhanced digital in-built mic, the V5 is a great choice for flexible, stylish web image and video applications. In the box is the polished-steel-cased aAgent V5 webcam with MacBook and iMac attachment clips, USB 2.0 and 1.1 adaptor, microfibre travel case and driver disc.

Email your tip with the subject header 'Help reader tip', including your full name, address and phone number, to [macworldeditor@niche.com.au](mailto:macworldeditor@niche.com.au) or make a contribution in the Help section of [www.macworld.com.au/forums](http://www.macworld.com.au/forums). All reader tips offered online or via mail/email become the sole property of Niche Media.



**Side-slip:** Mail plug-ins Letterbox and WideMail let you put the preview pane on the right.

### MOVE MAIL'S PREVIEW PANE

**?** Is there an application that allows you to put Mail's preview pane on the right side of the window?

*Art Martelli, via email*

If you prefer to view your Mail messages on the right rather than at the bottom (Mail's default), check out Aaron Harnly's free Letterbox ([harnly.net/software/letterbox](http://harnly.net/software/letterbox)) or Dane Harnett's WideMail (payment requested; [www.daneharnett.com/widemail](http://www.daneharnett.com/widemail)). Not only do these Mail plug-ins allow you to shift the preview pane, but they also perform some additional tricks.

With Letterbox, you can tweak the appearance of your message list by choosing to have alternating rows appear in color or adding line dividers between rows. WideMail offers the same customisations as Letterbox, along with a few more options. You can choose to show or hide relative dates (Today, Tomorrow, or Yesterday, instead of specific dates), add vertical as well as horizontal lines between rows and columns in your message list, change the color of those grid lines, and alter the spacing between the rows.

### ADD ENHANCED AUDIO TO iMOVIE

**?** I have successfully extracted audio from an iMovie 09 project, and would like to import that enhanced version back into the movie to replace the original sound. Is there a way to accomplish this and have it synchronise with the movie?

*Ralph Svendsen, via email*

For those who don't know how to do so, you can export an iMovie 09 audio track by choosing Share > Export Using QuickTime and selecting the option to export QuickTime to AIFF. You'll get an audio-only file that you can manipulate in another application.

Once you do, you can set about your dirty work in Apple's Soundtrack Pro or any other audio application you care to use. Do anything you like except change the duration of the audio file – play with the EQ, filter noise, or add an unhealthy amount of reverb. Just don't cut or add anything to the file. (If you do, the file won't be in sync when you add it back to your iMovie project.)

When you've edited the file to your liking, save it to the desktop. Open

— CHRISTOPHER BREEN

your iMovie '09 project and drag the saved audio file from the desktop to the beginning of the project in the Edit Project pane. That pane should turn green, and the name of your audio track should appear in white at the very top of the pane.

Click on the video track, choose Edit > Mute Track, and play the video. You've muted the video's original audio track and you should now hear just the enhanced track you added. Everything should be in sync.

You can leave things just as they are, or if you like, you can delete the original audio track. To do so, choose Edit > Detach Audio. The video's soundtrack will appear as a purple bar beneath the video track.

Click on that purple bar and then click on Delete. You're now left with just the audio track that you 'sweetened' with an audio editor.

— CHRISTOPHER BREEN

## SPLIT AND ARCHIVE iPHOTO LIBRARIES

**?** My hard drive is full. To make room, I would like to organise my iPhoto pictures by year, move the older ones to an external hard drive, and re-merge everything when I get a new Mac. How can I do that?

Via the Internet

You have two tasks to perform. The first is to sort your photos by year, and the second is to copy those pictures to a new library and delete them from the original library.

To organise your images by year in iPhoto '09 (part of the \$129 iLife '09 suite), choose File > New Smart Album. To find all pictures from the year 2005, for example, use the pop-up menus in the resulting window to create the following condition: Date is in the range →

## TIP: TWEAK iCAL EVENTS

One of our pet peeves with Apple's iCal is that new events are always created with a duration of one hour. There's no way to change this in iCal's preferences, and if you prefer 30 minutes, 15 minutes, or some other period as a default for new events, it's a pain to change each time.

There's a relatively easy fix for this problem (although it does require a quick trip to Terminal). Note that this solution has been tested only with iCal 3.0 (which comes with OS X 10.5).

Quit iCal if it's running, open Terminal (in /Applications/Utilities), enter this command, and press Return.

```
defaults write com.apple.iCal 'Default duration in minutes for new event' 15
```

Change the number 15 to whatever duration you'd prefer to use; it's specified in minutes. You can even use zero (0), if you want, to create new events with the same start and end time. Note that you will see just the Terminal prompt after you press Return.

Launch iCal and create a new event, and it should have your specified duration. If you want to go back to the one-hour default, quit iCal, return to Terminal, and enter this command:

```
defaults delete com.apple.iCal 'Default duration in minutes for new event'
```



## UltraClear



With the newly improved lightweight polycarbonate construction, this case is more durable and flexible than ever! It gives full access to all controls. The brilliant colors make cases transparent and greater intensity. Fantastic colors with custom design, that's

**Ultra Clear!** For further information, please visit : [www.ultra-case.com](http://www.ultra-case.com)

iPod is a trademark of Apple Inc., registered in the U.S. and other countries. iPhone is a trademark of Apple Inc.

STM query of the month:

## UNINSTALLING MAC SOFTWARE

If you want to uninstall software in OS X: go to the Applications folder, find the application you want to obliterate, and drag it to the trash. Then empty the trash.

Okay, so that's all well and good. But a lot of applications leave dependencies and libraries and the like scattered across your hard drive. And hunting them down and deleting them can be troublesome, or so I've found.

I've installed a fair amount of software on my new MBP – much of which I don't want anymore. I've ordered Snow Leopard, and I'm trying to clean up for it (I don't want to tarnish the speed or awesomeness). Honestly, I'm tempted just to reinstall Leopard (plus iLife, Xcode, and iWork) and start over, only reinstalling software I want to have. It seems easier than hunting down all these libraries. Or is there a better way?

Molecule, via Australian Macworld Forums

**Forum power mentor and former AMW Editor Chris Oaten replies:** Use Spotlight to search for the app you are about to delete or have deleted, then 'Show All' in a Finder window. For instance, if I search on Canon, I get a lot of images because I shoot with Canon and the camera is in the metadata, but I also find Canon printer drivers, Canon Utilities, Canon PDF manuals, etc.

You can drag items from those search results directly into the Trash, or right-click and choose 'Move to Trash' to send them there. Or, if that sounds like too much trouble, try [www.freemacsoft.net/AppCleaner](http://www.freemacsoft.net/AppCleaner)

And, of course, much of the software you've loaded will have an Uninstaller available where you found the original Installer.

Each month STM (02 8338 0222) gives a Remedy shoulder bag worth \$99.95 to the Australian Macworld reader who send in or posts to the forum the most intriguing query. STM's Remedy bag is a slim, light shoulder model that provides heavy-duty laptop protection. Send your query to [amweditor@niche.com.au](mailto:amweditor@niche.com.au) or post in the forums at [www.macworld.com.au/](http://www.macworld.com.au/) forums. All queries and solutions are the sole property of Niche Media.

## TIP: ESSENTIAL TEXT SHORTCUTS

Try these keyboard shortcuts to help with text editing: You can use ⌘-Up (or Down) Arrow to jump to the beginning (or end) of text in almost any application. Press and hold the Option key while pressing and releasing the Up (or Down) Arrow, for instance, to move up (or down) through aTextEdit document, one paragraph at a time. Try doing this with the Left and Right Arrows as well, and add the Shift key to many shortcuts for even more functionality.



**Picture this:** You can easily split and manage iPhoto libraries with iPhoto Library Manager.

1/1/2005 to 12/31/2005. Give the smart album an intuitive name—something like '2005'—and iPhoto will pull all of the images from that year into your album.

Now tool on over to Fat Cat Software ([www.fatcatsoftware.com](http://www.fatcatsoftware.com)) and pungle up US\$19.95 (about \$24) for the excellent iPhoto Library Manager. This utility makes it easy to create multiple iPhoto libraries and copy content between them.

In iPhoto Library Manager, click on the New Library button and give it a name, such as 'Pictures from 2005'. Save that library to your external hard drive. Now select your current iPhoto

library from the list on the left, locate your 2005 smart album from the list of albums in the middle, and drag it to the library you just created. iPhoto Library Manager will copy the images to the new library, along with their tags, keywords, and metadata.

Once the images have been copied, click on the radio button next to your original library in the iPhoto Libraries list and then select Launch iPhoto from the toolbar.

When iPhoto starts up, it will contain the contents of your original library. Highlight the smart folder you created ('2005', in our example), press ⌘-A to select all of the images in it, hold down the Option key, and choose Photos > Move To Trash. Control-click on the Trash in iPhoto's Library pane and choose Empty Trash.

When you get your new Mac, you can use iPhoto Library Manager to easily restore the images from your external drive. Open the library that contains your archived images and use the process described above to copy them to the Mac's iPhoto library.

— CHRISTOPHER BREEN



## AUTO-ENABLE PRIVATE BROWSING

**Q I'm using Apple's Safari 4 on an Intel iMac under OS X 10.5.6 (Leopard). I use Safari's Private Browsing feature much of the time, but I have to turn this feature on every time I launch my browser. So my question is: Is there a way to make this feature the default?**

Leo Campo, via email

When you enable Private Browsing (Safari > Private Browsing), Safari goes into stealth mode: it doesn't add Web pages you visit to its history, it removes items from the Downloads window, it doesn't remember searches in the Google search field, and it doesn't add items to the AutoFill database. Private Browsing helps ensure that others using your Mac can't follow your tracks – and that can be useful in a work environment.

But Private Browsing isn't a feature you can leave on. When you quit Safari and launch it again, you'll find that Private Browsing is turned off. And editing the com.apple.safari.plist file does you no good either. Safari just resets the option within the preferences file when you next launch Safari.

However, if you're running Leopard, you can automate the

process of enabling the Private Browsing option with AppleScript. First, launch the Universal Access system preference and select the Enable Access For Assistive Devices option.

Now, launch Script Editor (in Applications/AppleScript) and enter the following script:

```
tell application "Safari"
activate
end tell
tell application "System Events"
    tell process "Safari"
        tell menu bar 1 tell menu bar item "Safari"
            tell menu "Safari"
                click menu item "Private Browsing"
            end tell
        end tell
    end tell
end tell
end tell
end tell
end tell
```

Select File > Save, name the script, and then choose Application from the File Format pop-up menu. Click on Save. Put this application in a place where you can easily access it – on the desktop or in the Dock, for example. Now click on this application to launch Safari whenever you need to surf privately. When you do, Safari will launch with Private Browsing enabled.

— CHRISTOPHER BREEN

## TIP: USE THE KEYBOARD WITH SAFARI 4'S SEARCH BOX

In Apple's Safari 3 (and earlier versions of the browser), you could use the up (or down) arrow key to quickly move your cursor to the start (or end) of text in the Google search box. This made it really easy to add new terms to something you'd already typed. In Safari 4, however, the up and down arrow keys have been repurposed – they now scroll through the suggested matches for your Google search terms. As it turns out, you can still jump around the Google search box using the keyboard. All you need to do is add the Command key to the up or down arrow key, and you'll jump to the start or end of the text in the search box.



## UltraClear



With the newly improved lightweight polycarbon construction, this case is more durable and flexible than ever! It gives full access to all controls. The brilliant colors make cases transparent and greater intensity. Fantastic colors with custom design, that's Ultra Clear! For further information, please visit : [www.ultra-case.com](http://www.ultra-case.com)



# Subscribe now and save!

## It's easy as:

- 1. ONLINE:** [www.niche.com.au/subscriptions](http://www.niche.com.au/subscriptions)
- 2. FREECALL:** 1800 804 160
- 3. FREE POST:** Fill in the card on the reverse side & send it to the address specified

JOIN OUR ONLINE COMMUNITY  
[www.macworld.com.au](http://www.macworld.com.au)



Why is AMW the top choice for Australia's Mac enthusiasts?

- Over 20 years experience serving Australia's Mac community
- Unsurpassed expertise in news, practical advice and commentary
- Exciting reviews and features on the latest Macintosh products
- It's the first, best and only Mac magazine in the country!

**2 YEARS \$129 (INC GST) SAVE \$42\***    **1 YEAR \$79 (INC GST) SAVE \$9\***    **RENEWAL**

NAME \_\_\_\_\_  
 JOB TITLE \_\_\_\_\_ COMPANY \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 SUBURB \_\_\_\_\_ POSTCODE \_\_\_\_\_  
 PHONE BHOURS ( ) FAX BHOURS ( )  
 EMAIL \_\_\_\_\_

MY CHEQUE TO NICHE MEDIA IS ENCLOSED    PLEASE CHARGE MY CREDIT CARD  
 VISA    MASTERCARD    AMEX    DINERS CLUB



SIGNATURE \_\_\_\_\_ EXPIRY \_\_\_\_\_

PLEASE BILL ME

\*Savings based on annual cover price (\$83.40 inc GST) and \$5 website discount. For terms and conditions, please visit our subscriptions website.

 **FREE FAX**  
1800 802 326

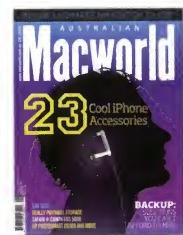
 **FREE CALL**  
1800 804 160

 **FREE POST**  
Niche Media Reply Paid 5177  
SOUTH MELBOURNE VIC 3205

 **ONLINE**  
[www.niche.com.au/subscriptions](http://www.niche.com.au/subscriptions)  
[www.macworld.com.au](http://www.macworld.com.au)

30841\_1

**SAVE UP TO  
25% OFF  
the cover price!**



Lock in  
this low  
rate for  
the next  
year or  
two!

A U S T R A L I A N  
**Macworld**



**GET \$5 OFF  
THE SUBSCRIPTION PRICE!**

**Subscribe online at  
[www.niche.com.au/subscriptions](http://www.niche.com.au/subscriptions)**

Promo code: MGAD

**GET 3  
COPIES OF  
EVERY ISSUE!**

**JUST \$3.75  
A COPY**

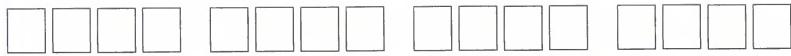
You're not going to  
get a cheaper price  
anywhere else!

A U S T R A L I A N  
**Macworld**

**2 YEARS \$270 (INC GST) SAVE \$230\***    **1 YEAR \$180 (INC GST) SAVE \$70\***    **RENEWAL**

NAME \_\_\_\_\_  
 JOB TITLE \_\_\_\_\_ COMPANY \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 SUBURB \_\_\_\_\_ POSTCODE \_\_\_\_\_  
 PHONE BHOURS ( ) FAX BHOURS ( )  
 EMAIL \_\_\_\_\_

MY CHEQUE TO NICHE MEDIA IS ENCLOSED    PLEASE CHARGE MY CREDIT CARD  
 VISA    MASTERCARD    AMEX    DINERS CLUB



SIGNATURE \_\_\_\_\_ EXPIRY \_\_\_\_\_

PLEASE BILL ME

\*Savings based on annual cover price (\$83.40 inc GST). For terms and conditions, please visit our subscriptions website.



**FREE FAX**  
1800 802 326



**FREE CALL**  
1800 804 160



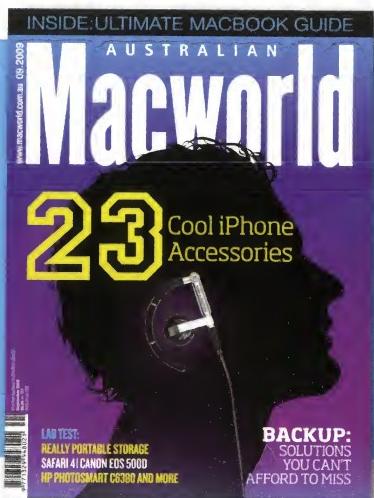
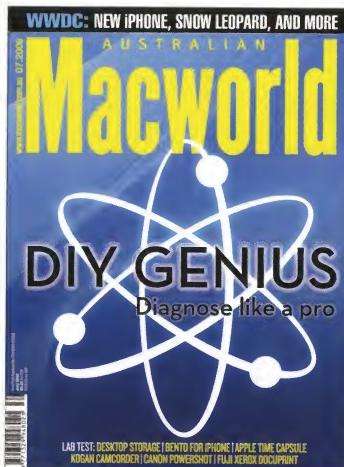
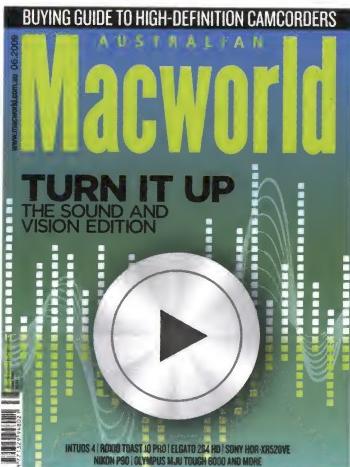
**FREE POST**  
Niche Media Reply Paid 5177  
SOUTH MELBOURNE VIC 3205



**ONLINE**  
[www.niche.com.au/subscriptions](http://www.niche.com.au/subscriptions)  
[www.macworld.com.au](http://www.macworld.com.au)

# AUSTRALIAN Macworld

Subscribe to AMW in October  
and receive **3 bonus issues!**



Subscribe now:

**2 years \$129 (save \$38) or 1 year \$79**

**Subscribe online:**

[www.niche.com.au/subscriptions](http://www.niche.com.au/subscriptions)  
and get \$5.00 off the subscription price!

**Freecall:** 1800 804 160

\*Promotion available to residents of Australia only.

30762\_2

# THE RIGHT ROUTE

When it comes to home networks you want a router that's easy to use, powerful, fast and versatile. ANTHONY CARUANA checks out how five of the latest shape up.

**B**ack in the day when the internet was young, routers were incredibly complex beasts that required a certified network engineer to configure and a huge wad of cash to buy. In fact, we recall buying a router to share a massive 64kbps ISDN connection at an office and having to invest the best part of \$100,000 for the privilege – and that was before the days of wireless.

Today, you can walk into just about any appliance retailer and walk out the door with a router for under \$100. We might be forgiven thinking that these devices must have been

simplified over the years but they remain complex pieces of hardware.

What's changed is that the software that we use to manage them has become so refined that just about anyone can configure a router and share an Internet connection to many computers easily.

We're going to let you into a secret – there's very little difference between most of the routers on the market today. For that reason, we suggest that after some research on reliability that most users focus their attention on how easy it is to set a router up and whether it's simple to change settings as needed.

The vast majority of routers are configured through a web browser.

is supported with every router we've ever used.

All routers are built to a set of standards so that all networking gear should work together regardless of brand. That's almost always true but when you're making a purchasing decision do some research.

If you're using an older Mac that had a USB or PC Card wireless adaptor then hit Google and look for any incompatibilities that others may have encountered. You're most likely to hit difficulty when matching older kit with newer gear.

With standards, there are couple of specific things to keep an eye on. For wired connections, all of Apple's current models, other than the MacBook Air, offer gigabit Ethernet. This means that wired connections have a rated maximum throughput of 1Gbps. While many routers support gigabit connections, not all do, particularly at the budget end of the market.

Wireless is a slightly different ballgame as the fastest wireless standard, 802.11n, was still in draft at the time of writing although it's due to be ratified around the time you're reading this and published in November. Every router manufacturer we've spoken to expects the shift from draft to final to be implemented by applying a firmware update to current routers. ➤

**We're going to let you into a secret – there's very little difference between most of the routers on the market today."**

The main exception is Apple, which uses its own Airport Utility for managing network devices.

We've focused our testing on how Safari works with different routers. However, it's worth noting that the majority of routers are made with Windows users in mind so it's a good idea, if you have to set a router up, to have Firefox installed as that browser



### Billion BiPAC 7404VNPX

As a Mac user you like your gear to be sleek, elegant – even sexy. Well, none of these words can be used to describe Billion's BiPAC 7404VNPX. But don't let the 7404VNPX's looks fool you. Under that chunky skin lies an ADSL modem and a 4-port gigabit router with 802.11n wireless that can share a 3G connection and a VoIP.

On our Mac, we had to go to the router's setup page via Safari. We prefer this approach as we can get all the settings right and the router secure. If you use Boot Camp or virtualisation software, there's a Windows-only installation app on the accompanying CD.

The 7404VNPX can accommodate both ADSL and 3G connections – even at the same time. This makes this a great router for those who need to set up ad hoc networks for events, and workplaces get the benefit of being able to use 3G as a failover if ADSL goes down.

Performance was solid. We shipped 480MB of files between systems in about 28 seconds – that's not much different to copying the same files to a USB 2.0 hard drive. Wireless performance was very good. It wasn't until we were about 15m away from the 7404VNPX before the signal dropped from maximum by a single bar.

**Australian Macworld's buying advice.** Sometimes we need to sacrifice form for function. Billion's BiPAC 7404VNPX ticks all the function and performance boxes. At \$479 the only feature we feel it's lacking is a USB port for drive and printer sharing.

Billion, [www.billion.com.au](http://www.billion.com.au)

**Pros** Performance, wireless range, 3G fallback

**Cons** Ugly

**RRP** \$429



### NetComm Turbo 7 Wireless Gateway

Provisioning an ADSL or cable internet service can be a royal pain in the butt. Telstra has partnered with NetComm to deliver a router that uses Telstra's NextG network so that you can take your Internet connection with you no matter where you go. The Turbo 7 Wireless Gateway looks great, is solidly made and was a snap to set up on our Mac.

All the installation files are contained on a USB stick that ships with the Turbo 7. The process is very straightforward. By the end of the process the Turbo 7 was connected to the NextG network and shared over wireless.

The Turbo 7's focus is on sharing a NextG internet connection over Wi-Fi. On this score it does a fine job. Wireless range, tested with a MacBook Pro 13-inch, was spectacular. We walked out of the office for about 35m and our connection didn't miss a beat. We were able to maintain a solid connection back to the Turbo 7 with the OS X Wi-Fi meter dropping by just a single bar and ping results showing that connection latency was barely affected.

The one set of users the Turbo 7 over NextG won't suit is people who need to upload files regularly, as upload speeds are still somewhat limited.

**Australian Macworld's buying advice.** If you need an internet service to take with you then you could do a lot worse than this. It's not cheap but it's very easy to set up.

Netcomm, [www.bigpond.com](http://www.bigpond.com), [www.netcomm.com.au](http://www.netcomm.com.au)

**Pros** Easy setup, wireless range

**Cons** Only two Ethernet ports

**RRP** \$529 outright or \$1565 over two years (\$165 up front plus \$59 per month)



## Apple Airport Express

Rather than taking the scattergun approach like many other network appliance makers, Apple offers three different products. It has the Airport Extreme that is a three-port gigabit Ethernet router with dual-band 802.11n Wi-Fi, the Time Capsule that is basically an Airport Extreme with a hard drive for shared storage and the Airport Express.

The Airport Express, or AX, looks like the power supply from one of Apple's notebooks. On its base there's an Ethernet port for connecting a cable or ADSL modem so you can wirelessly share an Internet connection. Adjacent to that is a USB port for sharing a printer or external hard drive and next to that is a 3.5mm audio input that can be used to stream audio from your iTunes library to a set of speakers.

Apple includes the Airport Utility with OS X so there's no need to install software. It detected the AX in a few seconds and guided us through configuration. We used the AX to extend an existing network and to test AirTunes – Apple's way of sharing music to remote speakers.

We were able to send output to the speakers we connected to the AX easily by selecting the output from iTunes. From iTunes we could even control the volume.

Configured as a wireless access point rather than as a node on our network the AX allows connections over 802.11n wireless at either the 2.4GHz or 5GHz frequencies. Its range was good, with a strong four-bar signal maintained at about 25m although as soon as there were some obstacles the signal fell quite quickly. As long as you don't have solid brick walls in your house the AX would be worth considering.

**Australian Macworld's buying advice.** Apple's Airport Express is a handy little unit. It's great for travellers wanting to create a wireless LAN using hotel broadband and has a place in the home with AirTunes and its ability to extend an existing LAN. It's not cheap but its usefulness goes beyond simple networking.

Apple, [www.apple.com.au](http://www.apple.com.au)

**Pros** Easy setup, AirTunes

**Cons** Wireless range

**RRP** \$179



## Belkin N+ Wireless Router

In an attempt to simplify the game of Jargon Bingo, Belkin's adopted a Good, Better and Best ranking for its networking kit. The N+ Wireless Router and its sibling the N+ Wireless Modem Router, sit in the 'Better' group.

Mac users will be happy that Belkin includes a simple application that makes setup a breeze. It took about 10 minutes from when the N+ was out of the box until it was serving an internet connection. However, as seems typical for most of routers, the setup program requires and configures an Internet connection before the wireless is secured.

Configuring other settings such as wireless security was made easy by a series of wizards – far less threatening than a browser-based utility. Similarly, there's a wizard for connecting and sharing a USB storage device.

Wired performance was outstanding – easily the fastest we looked at for this round-up. We were able to move our 480MB file package around in about 19 seconds over gigabit Ethernet with our MacBook Pro and iMac.

With the cables severed, we found that wireless range was very good, although not as spectacular. The N+ maintained a solid connection at 25m although we did miss a lot of packets in the ping test through a solid brick wall. However, that's typical of most routers.

### Australian Macworld's buying advice.

At around \$250, there's a huge amount to like about the Belkin N+ Wireless Router. It's easy to set-up, Mac friendly, looks good and offers excellent performance. An extra \$20 will buy you the Belkin N+ Wireless Modem Router that adds an ADSL router.

Belkin, [www.belkin.com.au](http://www.belkin.com.au)

**Pros** Wired performance, simple Mac-friendly setup, bang for buck

**Cons** None

**RRP** \$250





## D-Link Xtreme N Duo Media Router DIR-855

D-Link's been making consumer and small-business routers for a long time and that experience shows. The DIR-855 is a four-port router with gigabit Ethernet, 802.11n (2.4GHz and 5GHz), and hard-drive sharing through a USB port. The setup process is what we've come to expect from D-Link. There's a configuration utility for Windows, but other operating systems need to use a web browser.

A step-by-step wizard walks you through setup.

As the DIR-855 supports both 2.4GHz and 5GHz, it's able to create two, separate wireless LANs. This can be very handy, particularly for networks that see frequent visitors. It's possible to create one network that only sees the Internet and another for staff with full access to the entire network.

Performance was excellent. We copied a 480MB package of files between a current 20in 2.66GHz iMac and a 13in MacBook Pro in about 24 seconds. Wireless range was very good with a solid connection maintained over 20m. Brick walls between the test system and DIR-855 saw missed packets in the ping test.

The DIR-855's OLED screen is small but gives an easy indication of connections, wireless status, internet connectivity and network performance.

**Australian Macworld's buying advice.** This router is difficult to fault. It offers excellent performance, easy setup and great flexibility. The question is, will you pay the \$595 price tag or settle for less flexibility and lower performance. ☐

D-Link, [www.dlink.com.au](http://www.dlink.com.au)

**Pros** Support for dual wireless LANs

**Cons** No Mac software

**RRP** \$599



## WIRELESS SECURITY

Securing a wireless network is one of those things that sounds obvious. But with security researchers estimating that up a quarter of all wireless networks are either unsecured or using default settings, it's clear that it's not easy to do. Here's *Australian Macworld's* quick guide to securing your wireless LAN.

**SSID broadcast.** Many wireless security experts used to recommend disabling SSID (Service Set Identifier). Our verdict – don't bother. When a computer connects to a wireless LAN (local area network) one of the first things it does is to send the wireless name, or SSID, over the air, unencrypted. If someone wants to hack your wireless LAN this option won't stop them. All it does is add another layer of management to your network.

**Encryption.** There are lots of different encryption standards around. The one to use is WPA or WPA2. The older WEP standard has been hacked many times as it only requires someone to collect a number of data packets to break. WPA (Wi-Fi Protected Access) is far more secure and, until now, hasn't been broken.

**Change the default password.** Most routers ship with a default username and password. The first thing you should is change them. In a business environment, anyone on the network could change network settings unless you change the settings.

The screenshot shows the 'Wireless' tab of the D-Link DIR-855 configuration interface. The 'Wireless Mode' dropdown is set to 'Participate in a WDS network'. The 'Wireless Network Name' is 'Australian Macworld'. The 'Radio Mode' dropdown is set to '802.11n (802.11b/g compatible)'. The 'Channel' dropdown is set to '1'. The 'Wireless Security' dropdown is set to 'WPA/WPA2 Personal'. The 'Wireless Password' field contains '\*\*\*\*\*'. The 'Verify Password' field also contains '\*\*\*\*\*'. A checked checkbox says 'Remember this password in my keychain'. At the bottom are 'Wireless Options...', 'Revert', and 'Update' buttons.

# AUSTRALIAN Macworld

Over 24 years, Australia's  
Macintosh Authority

IT'S YOUR **MAC**. IT'S YOUR **WORLD**.

[www.macworld.com.au](http://www.macworld.com.au)



NOW ON  
TWITTER



# Multimedia marvel

## iPhone-savvy satnav for a good price

We're becoming surrounded by technology in our cars. We listen to the radio and CDs via a built-in car headunit. We listen to our iPods or iPhones via a device such as an FM transmitter. We use our mobile phones via a Bluetooth handsfree system. And we navigate via a GPS satnav unit attached to the windscreen.

In short, we're becoming dangerous drivers by trying to do too much at once while on the road.

You might have a device that combines one or two of these functions – such as an FM music transmitter that also acts as a handsfree speakerphone – but what you really need is a unit such as Pioneer's new AVIC-F310BT.

It's a double-DIN headunit (one of the bigger, squarer units rather than a smaller, rectangular one) that combines all of the functions mentioned above into a very slick package – with iPhone compatibility.

Pioneer Electronics Australia media manager Michael Broadhurst recently popped over to AMW HQ to show off the new unit.

"We don't call this a car stereo, or satnav system," he says. "It's a

**This does the multitasking for you... this is the future."**

multimedia unit ... it's everything." And while using multiple units forces you to multi-task while you're driving, "this does the multitasking for you," Broadhurst says. "This is the future."

The 310 is a good-looking device that has a mid-sized 4.3-inch touchscreen taking up most of the space, with four buttons and a nice, big dial providing extra functionality to its left. The colour of the dial's seat and other highlight areas can be changed.

A CD drive and SD memory card slot complete the package, which looks factory-fitted.

The 310 is the entry level model in a lineup of three, and while it might lack some of the features of the others – such as a larger screen, DVD player and traffic updates – it provides plenty for a price of \$1199 (and a street price of about \$999). This price, by the way, is about a third of what you were paying for the equivalent unit just two years ago.

First off, the touchscreen is nice and bright, with a matte finish and a decent viewing angle. You plug your iPod or iPhone in using a lead which the installer can place where you want – in the glovebox or between the seats is most common. This gives you full control over your music from the 310's touchscreen, and charges the device at the same time.

The onscreen functions include nice touches such as 'Link to artist' and 'Link to genre' buttons, which saves you having to take your eyes off the road for too long to search for more of your favourite music.

I've always been impressed by Pioneer's satnav units, and this one is no different. Using Wherels maps, the 310 gives you all the features you'd expect, plus a few more.

It has text-to-voice capability, which means it'll say the street name, for example, instead of just "Turn right".



## Pioneer AVIC-F310BT

Pioneer Australia,  
[www.pioneer.com.au](http://www.pioneer.com.au)

**Pros** All-rounder; made for iPhone; top quality

**Cons** Mid-size screen; no DVD; no traffic updates

**RRP** \$1199



There's an ABC point-of-interest (POI) function, which is great for searching when you know the name of a business rather than the address.

And you can call POIs just by touching them.

On the phone side, the 310 recognises up to three phones using Bluetooth. It mutes any other audio when you're on the phone, and call volume can be adjusted on-the-go.

You can transfer all your contacts from your iPhone or other phones to the 310, which makes dialling while driving a lot easier and safer.

**Australian Macworld's buying advice.** A really nice satnav – sorry, multimedia – unit at a good price for the features it offers. It's easy to use, and everything about it is top quality.

— DAVE BULLARD



# Light-years ahead

But be wary of Firefox speed claims

**A**fter the great leap forward in speed, design, and overall polish that Mozilla's open source Firefox web browser enjoyed in version 3.0, it's probably understandable that version 3.5 represents a more modest advancement.

While it doesn't stand out dramatically from its predecessor, the new version does bring Firefox closer to the cutting edge of web standards, and offers a handful of clever innovations in privacy that its rivals would do well to steal for themselves. But the browser's much-ballyhooed claims of a big speed boost aren't all they're cracked up to be.

On its website, Mozilla touts version 3.5 as "the fastest Firefox ever". But that claim refers solely to its new TraceMonkey JavaScript engine, which handles many of the web's interactive elements, but not the fundamental rendering of HTML code. Its assertion that Firefox 3.5 is more than twice as fast as its predecessor here is true – but Mozilla doesn't elaborate on how the new version compares to rivals.

And while its JavaScript performance has definitely improved, Firefox 3.5's speed in other areas actually seems to have decreased.

Mozilla bases its speed-boost claims on results from the SunSpider JavaScript Benchmark. My own SunSpider tests, on a 2GHz aluminum MacBook with 2GB of RAM, roughly matched Mozilla's results. Firefox 3.0.10 completed the test in 3,645.8 milliseconds, while Firefox 3.5 roared past it in 1,464.4 milliseconds. But Apple's rival Safari 4 browser soundly thumps both of them in the same test, clocking in at 756.4 milliseconds – nearly twice as fast as Firefox 3.5.

Despite these test results, and other similar ones, it's important to note that Firefox 3.5 never felt sluggish

in normal use. In my tests, it rendered web pages quickly, displayed code that thwarted earlier browsers without a hiccup, and seemed just as nimble and responsive as Safari 4.

Firefox 3.5, like Safari 4, includes support for the latest additions to the still-developing HTML 5 markup language, including the ability to play video and audio files without any special plug-ins. Unfortunately, Apple and Mozilla each support only one of the two video formats HTML 5 embraces. Apple prefers its homegrown H.264 codec, while Mozilla advocates Ogg Theora.

Firefox 3.5 boasts support for location-aware browsing, a new option in feature that may strike some as incredibly cool, and others as creepily Orwellian. Sites that employ location-awareness can use data about the network to which you're connected to plot your geographic position – for example, to automatically bring up a list of all the restaurants near your computer.

Regarding privacy, Firefox 3.5 also does more than any previous version of the browser to keep your surfing safe from prying eyes.



It still works with an army's worth of user-created add-ons, and tabbed browsing gets an extra layer of polish.

Users of Apple's newer laptops will also enjoy Firefox 3.5's full support for gestural controls, including swiping to move back and forward and pinching to zoom in and out.

## Firefox 3.5

Mozilla, [www.mozilla.com](http://www.mozilla.com)

**Pros** Easy to use; impressively extendable; superb, thoughtful privacy features.

**Cons** Not a huge improvement on its predecessor; speed boost claims don't tell the whole story.

**RRP** Free



## Australian Macworld's buying advice.

If you have the need for speed above all else, Firefox 3.5 can't hold a candle to Safari's raw power. But for most users, the difference will be negligible. Firefox has evolved into a beautiful, polished program that's a pleasure to use. When it comes to customisation and flexibility, it's light-years beyond any other browser on the market. ☺

— NATHAN ALDERMAN

# Go by the Book

Lots of storage at a decent price

For some, a roomy amount of storage space at an affordable price is top priority in a hard drive – that is, you don't care if a hard drive looks functional but not stylish. If this is the case, Western Digital's My Book Mac Edition desktop external drive fits the bill.

It's bulky and thick, about as wide and tall as a hardcover book. It's also heavy and will most likely spend its life perched on your desk. Should it fall, I wouldn't trust it to survive a drop of more than a few feet; the exterior seems poorly equipped to cushion the mechanism inside.

As the name implies, the My Book Mac Edition is designed for the Mac and is Time Machine-ready. The 1TB capacity in the unit I tested ensures that everyone, save professional video and audio editors, will have plenty of storage space for documents, files, and folders.



It's a speedy USB model, but that speed is relative – even at its fastest, USB connections are still much slower than FireWire 800, 400, or eSATA. Yet, having said that, USB is the most universal connection on the market currently and is compatible with everything from old MacBook G4s to new MacBook Airs.

The hard drive mechanism inside the My Book Mac Edition uses Western Digital's GreenPower technology. Western Digital says that GreenPower helps save power by optimising the drive's spin speed, transfer rates, and caching.

In our performance tests, the My Book Mac Edition had strong times for an USB-only drive. The drive finished our 1GB copy test in 49 seconds, marginally faster than competing USB-only desktop drives. In our duplication test, the My Book Mac Edition finished in 1 minute, 14 seconds, the exact same time as Seagate's FreeAgent Desk using USB.

The My Book Mac Edition produced a new top score for a drive using a USB connection in our low-memory Photoshop test, taking only



## My Book Mac Edition 1TB

Western Digital, [www.wdc.com](http://www.wdc.com)

**Pros** Good USB speed; large capacity

**Cons** USB only; bulky.

**RRP** \$179.99



1 minute, 31 seconds to complete the test. This betters other desktop drives USB scores and beats the USB-only SimpleTech [re]drive by 30 seconds.

**Australian Macworld's buying advice.** Generally, large-capacity drives are for users with massive storage needs, requiring extra space to fit music, videos, and other large-size media files.

Moving this much data to a hard drive takes time, and that's where USB-only devices really come up short. FireWire 800 can transfer files many times faster than USB, which is why OWC's Mercury Elite-AL Pro, equipped with FireWire 800, 400 and USB connections, is a more versatile and practical drive for users with large storage capacity needs.

That said, Western Digital continues to produce quality drives designed for the Mac, and many users know and trust the brand. If speed isn't your thing, the strength of the brand, large capacity, and comparatively fast USB connections may satisfy your needs. ☺

– CHRIS HOLT

# Taking it on the RØDE

Podcast mic stands the test of time

I bought my RØDE Podcaster when we began the first series of *Australian Macworld* podcasts late 2007. I didn't really have a microphone good enough for the gig and I also needed something better to record voiceovers and interviews for my varied multimedia projects.

The new Podcaster offered a few pluses. It was Australian-made, broadcast quality, custom-designed for voice recording, and plugged straight into my Mac via USB with no interface or mixer needed.

At that time AMW music man David Holloway had also acquired a Podcaster and he was equally impressed. Most of the AMW podcast

to 10cm away is a good place to start, but a lot depends on the power of the individual voice.

You also need to be front-on as the mic works on a typical dynamic cardioid, or heart-shaped pattern. It rejects sound from the side and rear.

So if there's two or more of you on air you need to be ducking in and out to grab that front and centre sweet spot.

The Podcaster has also been designed to enhance bass response at close range. This is a bonus because you get a full, rich sound with little need for post-production tweaking.

If you plan to use the microphone frequently I can't recommend strongly

enough that you get a RØDE shock mount and arm. Once you've used this rig you will never go back. Another very useful feature is the 3.5mm headphone socket on the body of the mic itself.

#### **Australian Macworld's buying advice.**

The RØDE Podcaster ticks all the boxes on quality and ease of use for voice recording. Over nearly two years of recording a variety of voices in the studio and on the road, my Podcaster has provided consistent quality sound. ☀

— KEITH WHITE

*Listen to the AMW podcasts at [www.macworld.com.au/podcasts](http://www.macworld.com.au/podcasts).*

**You get a full, rich sound with little need for post-production tweaking."**

crew is now using the Podcaster, and we thought it was high time we reviewed it in these pages.

Out of the box you get a reassuringly solid (610g) white enamel body with sturdy steel mesh at the business end. It comes with a standard mic stand fitting and a three-metre USB cable.

It couldn't be simpler to set up. As soon as you plug the Podcaster into a USB port on your Mac a green LED on the body of the mic lets you know you're connected. Open Sound Preferences in the System Prefs on your Mac and you'll find the Podcaster already there as an option. Select it as your input and you're ready to begin.

Like most USB mics the Podcaster needs to be driven hard so I recommend you set the input level fairly high in Sound Preferences.

The Podcaster works best when you get up close and personal. Eight

## RØDE Podcaster

RØDE Australia,  
[www.aus.rodemic.com](http://www.aus.rodemic.com)

**Pros** Rugged construction; designed for broadcast-quality voice recording; USB connection to Mac obviates need for interface; built-in 3.5mm headphone output; 10-year warranty

**Cons** Heavy if you're not using the RØDE studio arm and shockmount

**RRP** Podcaster \$345, PSM1 shockmount \$53, PSA1 studio arm \$132.



## Morpheus Photo Animation Suite

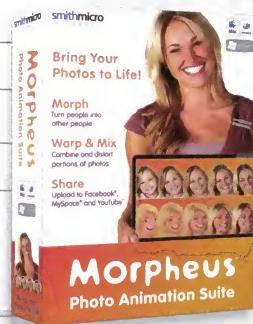
PICA Australia, [www.pica.com.au](http://www.pica.com.au)

**Pros** Fun to use

**Cons** Feels like a PC port

**Publisher** Smith Micro

**RRP** \$49.95



## Magic moments

Here's an app designed to do just one thing – animate still images, either by morphing or mixing. A morph turns one image into another, such as a dog into a horse. A mix adds elements of one picture to another, such as putting a dog's head on a horse's body.

It's surprisingly easy. At its most basic you load two images and apply dots to advise the rendering engine of its key details (eyes, ears, shoulders, etc). Morpheus automatically adds corresponding dots to the second image, whose position must be adjusted so that Morpheus can render the movement of the details.

You then render the timeline and, voila, your images morph into one another.

All in all, this app does a good job of the claims made on the packaging. Amateur video enthusiasts could use it to jazz up their movies, and kids would have a hoot putting elephant trunks on their dad's face.

You can output your morph/mix timelines to QuickTime, uncompressed AVI, Flash, or an animated GIF. The Share menu lets you bundle your morph into an email or post it to the Morpheus website. With both of these options, however, Smith Micro takes advantage of the opportunity to sell the product to your friends.

But this kind of product spruiking is not Mac-like. It's a Windows-style business method that tastes a little sour. It's obvious that here we have a Windows port that was undertaken with a lack of sensitivity to Mac users.

**Australian Macworld's buying advice.** Morpheus does its job well. If you have a need for an easy way to create animated photo effects, here's the ideal product with which to do it. But Smith Micro needs to make Mac software that better engages its user. ☺

— CHRIS OATEN

## Colour me content

Monitor calibrator is quick and easy

Fact. The accuracy of a monitor's colour changes over time. The problem vexing its user is that any shift in colour accuracy is so glacially paced that it goes unnoticed.

This can mean that a photograph colour-corrected and printed in January could end up looking different to one printed yesterday. This equates to a waste of resources as the print will need to be done again, if consistency is important.

This could not have been more obvious than when conducting a simple test. We found a reference print from earlier in the year. Then we put it away and printed the image again, using the same printer and paper type as before, while 'eyeballing' the colour accuracy on screen. With the new print done, we compared the two.

The most recently printed photograph had a noticeably greener tint than the earlier print. Then we ran a calibration procedure using the Spyder3 in conjunction with its Spyder3 Elite software and printed the same image again. The green tint – the result of adjustments being made for a colour balance that was apparently too magenta, and too warm – was gone.

For this task, the Spyder3 steps up to the plate. Plug it in via USB, launch the software, match the placement of the Spyder3's sensor to an on-screen graphic, and, after confirming the type of monitor being calibrated, run the calibration sequence.

A set of pure red, green and blue tones, then black and a range of grey tonal values are screened. These are assessed via feedback from the calibration sensor, which then changes the monitor settings to the 'correct' colour and establishes a reference colour profile, which can be loaded into profile-aware software for consistent colour during editing. This will be appreciated by anyone who, for instance, does round-trip editing between Aperture and Photoshop.

The only difficulty we had with the software was that it sometimes refused to recognise the hardware.

### Australian Macworld's buying advice.

If you want to maintain consistent colour control, you need a calibration tool. The Spyder3 gets the job done quickly and easily. There is a less expensive \$275 option to the Elite, called Spyder3 PRO. ☺

— CHRIS OATEN

## Spyder3 Elite

Kayell Australia, [www.kayellaaustralia.com.au](http://www.kayellaaustralia.com.au)

**Pros** Easy to use

**Cons** None of any concern

**RRP** \$399





# FINDER



**PH:** 1 800 817 1471  
**Email:** info@circusponies.com  
**Web:** www.circusponies.com  
**Page:** 13



**PH:** 02 9975 0900  
**Email:** info@conexus.com.au  
**Web:** www.conexus.com.au  
**Pages:** 11 & 53



**PH:** 1300 886 590  
**Email:** sales@corsairsolutions.com.au  
**Web:** www.corsairsolutions.com.au  
**Page:** 57



**PH:** 1800 334 684  
**Email:** sales@designwyse.com.au  
**Web:** www.designwyse.com.au  
**Pages:** 2 & 3



**South Melbourne** 64 Clarendon St,  
**PH:** 03 9684 3600  
**Malvern** 1420 High Street,  
**PH:** 03 9508 2600  
**Geelong** Westfield Geelong,  
**PH:** 03 5223 1550  
**RMIT** Main Campus, Swanston St  
**PH:** 03 9654 8111  
**Doncaster** Westfield Doncaster  
**PH:** 03 9684 3688  
**Monash** Campus Centre, Clayton  
**PH:** 03 9684 3655  
**UTS On-Campus** 235 Jones St, Ultimo  
**PH:** 02 9951 7940  
**Crows Nest** 222 Pacific Hwy,  
**PH:** 02 9951 7979  
**UNSW** Main Campus, Randwick  
**PH:** 02 9385 2377

**Email:** sales@compnnow.com.au  
**Web:** www.compnnow.com.au  
**Page:** 35



**FileMaker**  
**PH:** 1800 028 316 (Aust)  
0800 444 929 (NZ)  
**Web:** www.filemaker.com.au  
**Pages:** 83

**simms**  
creating more opportunities

**PH:** 1800 800 703  
**Email:** sales@simms.com.au  
**Page:** 33



**PH:** 08 9274 7111  
**Web:** www.webequip.com.au  
**Page:** 21

**splicecom**  
australia

**PH:** 02 9922 0988  
**Email:** info@splicecom.com.au  
**Web:** www.splicecom.com.au  
**Page:** 41



**mac centre**  
**PH:** 02 9281 4444  
**Email:** info@maccentre.com.au  
**Web:** www.maccentre.com.au  
**Page:** 23



**PH:** 1800 648 628 (AU) 64 9 263 9885 (NZ)  
**Email:** sales@syntec.com.au  
**Web:** www.syntec.com.au  
**Page:** 29



**MacSpeech**  
**MacSense** australia

**PH:** 02 9798 3288  
**Email:** sales@macsense.com.au  
**Web:** www.macsense.com.au  
**Page:** 17

**TRY&BYTE**

**PH:** 02 9906 5227  
**Email:** info@tryandbyte.com.au  
**Web:** www.tryandbyte.com.au  
**Page:** 59



**PH:** 03 9662 9666 (Melbourne)  
02 8383 1600 (Sydney)  
**Web:** www.mymac.com.au  
**Pages:** 6, 7 & 49



**Email:** sales@ultra-case.com.au  
**Web:** www.ultra-case.com.au  
**Pages:** 63 & 65

## Other World Computing™

**PH:** 815 338 8658  
**Email:** sales@macsales.com  
**Web:** www.macsales.com  
**Pages:** 4 & 5



**Web:** www.wacom.com.au  
**Page:** 84



**PH:** 1800 060 852  
**Email:** sales@pioneer.com.au  
**Web:** www.pioneer.com.au  
**Page:** 15



**PH:** 603 881 9200  
**Email:** sales@zco.com  
**Web:** www.zco.com  
**Page:** 19

## Apple Computers

- Authorised Reseller
- Competitive prices
- Buy Australia-wide online
- Convenient store hours

## Apple Service

- Apple authorised service
- Average 3.2 day turn-around
- Available on-site in Melbourne

## iPod & iPhone repairs

- Free assessment for iPods
- \$66 assessment fee for iPhones
- 6 month warranty on parts
- iPod repairer since 2005

## Matte screens

MacBook and  
MacBook Pro  
matte screen  
replacements



- Removes the glare permanently
- MacBook retains Apple warranty
- From \$399 for exchange display

 **synergetic**  
Australia Pty Ltd

315-319 High Street, Kew, Vic. 3101  
Phone (03) 9855 2323  
[www.synergeticaustralia.com](http://www.synergeticaustralia.com)

## Kensington



Quality peripherals for your notebook, desktop and iPod. Proudly distributed by Try and Byte.  
To view the full range of products, please visit our website.



Quality Ex Demo  
Superseded Macs  
All with Warranty

[www.macsasnew.com.au](http://www.macsasnew.com.au)  
always updated with current stock

330D Miller Street  
CAMMERAY  
NSW 2062  
ph: (02) 9922 2327



Apple Secondhand Reseller

## SECURITY CAM

Security Software & Hardware for Mac



Record/View on Mac, PC or iPhone  
Retail, Home, Industrial, Wireless or LAN.  
I.P. & Analogue Cameras

Protect your Home or Business

**PENTAGON** 546 Whitehorse Road Mont Albert  
digital Vic 3127 Ph: 03 9896 1555

## Data Detect MAC Hard Drive Data Recovery Specialists



- Australia's Premier Data Recovery Company
- Hard disk recovery (internal HDD and USB)
- Free** diagnostic evaluation and quotation
- Your data back or **NO CHARGE - GUARANTEED**
- Nation wide free return postage
- Quickest turn around time
- Class 100 certified **CLEAN** environment
- Emergency services
- RAID recovery experts



Tel: (02) 9929 4822 - 24/7 hour Emergency service: (02) 9460 3864

Email: [info@datadetect.com.au](mailto:info@datadetect.com.au) - [www.datadetect.com.au](http://www.datadetect.com.au)



## On-Site Mac Service

We come to you, anywhere in Melbourne Metro area

RESIDENTIAL & COMMERCIAL

- Apple Mac Troubleshooting
- Installation & Maintenance
- Networking, Internet & Email
- Upgrades & Independent Advice

Phone: 1800 762 040

Email: support@macaid.com.au

Visit: www.macaid.com.au

## Professional Solutions, Service and Support (Since 1982)

- Onsite Mac Service - Home, Office
- Xserve network integration
- Telephony on Macs
- Inventory, POS, Manufacturing
- MacPractice Medical Accounting
- Security Cameras on Macs
- Small & large Installations



PENTAGON [www.pentagon.net.au](http://www.pentagon.net.au)

[sales@pentagon.net.au](mailto:sales@pentagon.net.au)

Cnr Union & Whitehorse Rd  
Mont Albert 3127  
Mon-Fri 9am-5:30pm  
Sat 9am-5pm



9896 1555

# SALE \$94.95

WAS \$119.95  
HUGE SAVING

## apple help?

apple computer & ipod service centre



## The Mac Doctors

Authorised Service Provider

459 Flinders St Townsville City Ph: (07) 4724 5889

449 Ipswich Rd Annerley Brisbane Ph: (07) 3848 9438

## Adelaide's Mac experts



iMac



Exciting new store - 08 8260 1311

free quotes.

8A Light Common  
Mawson Lakes.

free parking.

sales. service.  
support. upgrades.  
onsite repairs.



data recovery. new/  
used showroom.  
ipod repairs/sales

[www.macsolutions.com.au](http://www.macsolutions.com.au) | [sales@macsolutions.com.au](mailto:sales@macsolutions.com.au)

## INVENTORY MANAGEMENT & POINT-OF-SALE

- Easy Workflow • Powerful Reporting



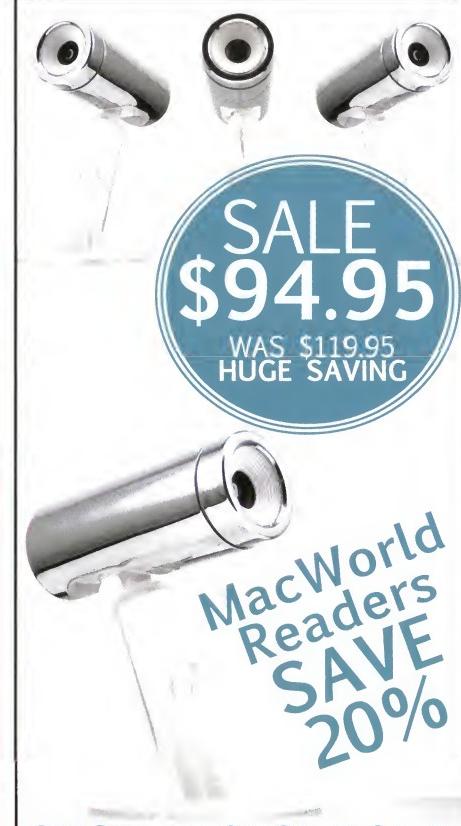
Competes with mass merchant systems at an affordable price!

Symbiotic Australia  
[sales@symbiotic.com.au](mailto:sales@symbiotic.com.au) Ph: 03 9895 2999

## Great Mac Service & Sales

Established in 1990, **Microseconds** is a Sydney based specialist in new and used Macintosh computer sales, service, repairs and a wide range of spare parts. We also purchase 2nd Hand Macs. For a full description of our current professional, friendly service, call or (better yet) consult our comprehensive website at:

**[www.microseconds.com.au](http://www.microseconds.com.au)**



## SPECIAL MACWORLD SALE

The NEW aGent V5 webcam is now on sale for MacWorld readers for a limited time only. Get your hands on this full HD webcam today!

To celebrate the sucess of our new edition we are offering MacWorld readers 20% OFF the aGent V5 webcam from Liquid Digital.

Visit [liquiddigital.com.au](http://liquiddigital.com.au) add the aGent V5 to your shopping cart enter the code MACWOCT09 at the checkout to save 20%!

\*Sale price of \$94.95 only available with a purchase of the V5 webcam when you enter the code MACWOCT09 at the checkout. Offer valid until 01/11/09.

AGENT VS HD  
[www.liquiddigital.com.au](http://www.liquiddigital.com.au)



Macintosh Computers & Peripherals  
Suite 214, 22-36 Mountain Street  
Broadway NSW 2007  
Telephone: (02) 9281 6393  
Facsimile: (02) 9281 4130  
[sales@microseconds.com.au](mailto:sales@microseconds.com.au)



ONE MORE THING...

## Macs, everywhere

**W**ith all the hype around the iPhone, it's important not to forget that Apple continues to have a strong business designing, manufacturing and selling a popular line of computers known as the Mac.

It's easy to get sidetracked, I know. Talking about iPhones is sexy, there's a new 'must-have' app each week, and well, Apple are selling them by the bucket load.

But let's not forget that the Mac really made a name for Apple, and like it or not, it's still of great strategic

the same period a year ago, despite the downturn in the economy.

We see Macs everywhere. Not just in the homes of family and friends but in cafes, office buildings and schools. A few years back, it used to be hard to convince someone to buy a Mac, now it's easy.

So what's behind this shift?

The first reason is the iPhone/iPod effect. Both products are now so entrenched in the consumer's psyche that the Apple brand touches nearly everyone, in a positive way. I believe this 'halo-effect' translates to sales of

Even if the platform is still an issue for some users who require legacy support for older applications, buying a Mac is now a low-risk option thanks to Boot Camp, Parallels and VMWare. All of these products give Mac buyers the confidence that if it all goes wrong they can always run Windows and use their old programs without a problem.

And finally it comes down to the hardware and software – the absence of viruses, spyware and bloatware and the inclusion of great free software like iPhoto, Garageband and iMovie.

The hardware looks great, works well and, when compared to a comparable PC brand like HP, costs about the same – and in many cases less when you add in the overhead costs of running a PC.

All this is causing a tidal wave and Mac sales are at the tipping point. In fact, they've already tipped at the high end of the market, but what's left is for more businesses to consider Macs.

Look no further than Snow Leopard to help usher in this change. It is stable, mature and comes with free Exchange support – so Macs can plug in to Microsoft Exchange networks out of the box, something a PC can't even do – a significant cost saving for organisations that rely on Microsoft Exchange. ☺

## Apple sold 13 percent more Macs in Q2 this year, despite the downturn."

value and will continue to be in the medium term. Apple's line-up of portables and desktops has never been stronger, from the monster Mac Pro with 16 cores of processing power to the budget Mac Mini. According to a recent report from NPD, 91 percent of all computers sold at US retail for more than US\$1000 were Macs. That's up from 66 percent a year ago, and even marks a slight increase from the 88 percent in May.

If you don't trust NPD data then look to Apple's own books for the information. In its most recent earnings call Apple confirmed that it sold 13 percent more Macs during April, May and June of this year than

Macs when consumers are ready to buy a new computer. I know it has for a number of my friends and family.

Also, no longer are Macs just available from Apple centres. There are hundreds of suppliers ready to sell you a Mac.

And there are also dedicated Apple Stores in high-trafficked shopping centres. If you've visited one you'll understand why consumers love them.

The second reason is the internet, the great platform leveller. More and more services are moving to the web and becoming platform-independent. This is slowly undoing the lock-in that Microsoft created.



Pizza Hut  
**hot**  
2 you!

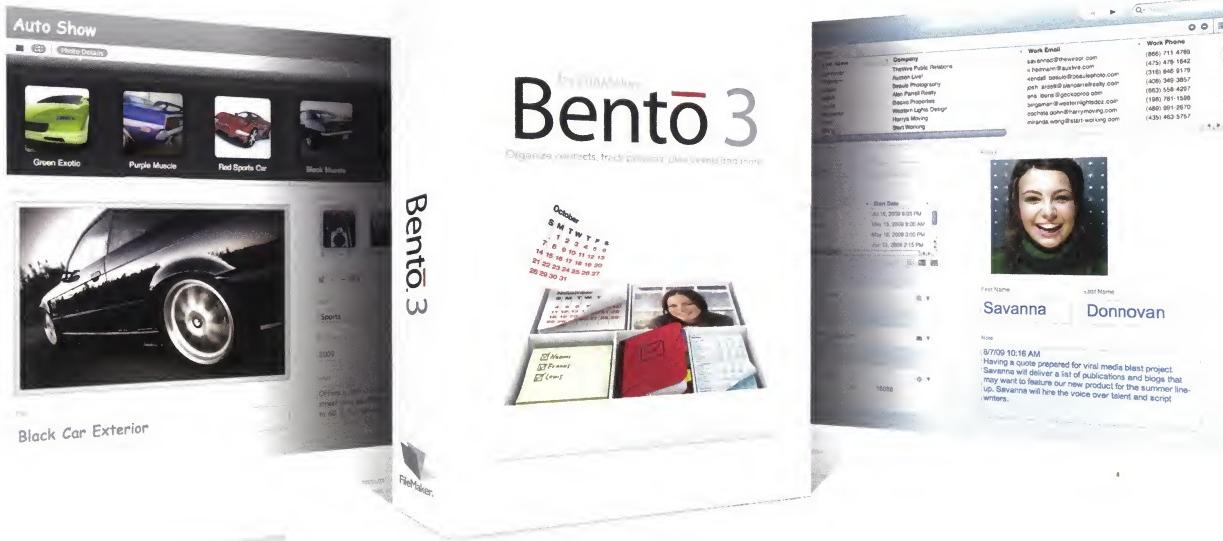
**WARNING! HOT PIZZA  
HOTTER THAN YOUR MAC!**

we **GUARANTEE** hot pizza

Order online today at [www.pizzahut.com.au](http://www.pizzahut.com.au)

# Meet Bento® 3

Organise contacts, track projects, plan events and more – all in one place!



**New Bento® 3 includes iPhoto integration, built-in security options, multi-user sharing, and much more!**



#### Bring together Address Book, iCal, Mail, iPhoto and more!

Now you can organise your important information—from contacts and calendars, to emails and events, to files and photos—all in one place.



#### The perfect complement to your spreadsheet.

If you're managing lists in Microsoft Excel or iWork Numbers, you can easily bring them into Bento to view your information in beautiful Bento forms, get easy iTunes-style searching, instant sorting, quick summary stats, and much more!



#### Get organised with style.

Choose from 35 pre-designed templates included with Bento, import templates from others, or create your own forms using beautiful themes designed by Mac artists.

Bento is available at an Apple Store near you, or buy online at [www.filemaker.com.au/bentoMac](http://www.filemaker.com.au/bentoMac)  
Just AU\$79 (inc GST)

Upgrade Rebate Offer: Bento 1 and 2 owners can save AU\$25 or NZ\$30 on Bento 3.

Offer expires 28/01/2010

© 2009 FileMaker, Inc. All rights reserved. FileMaker, the file folder logo, Bento and the Bento logo are registered trademarks of FileMaker, Inc. in the US and other countries. All other trademarks are the property of their respective owners.





a touch of inspiration



[www.wacom.com.au](http://www.wacom.com.au)